1 Measurement and Probability

Career Link

A number of jobs depend on the weather. Brandon owns a fishing boat. Before he takes his boat out each day, he checks the weather forecast. He needs to be aware of the probability of bad weather.

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Add Bar to this.

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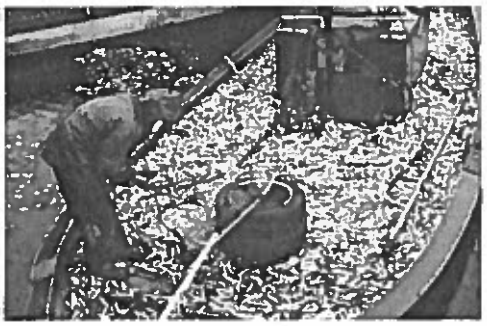


Get Ready

Write each fraction in lowest terms.

$\frac{2}{8}$ $\frac{9}{33}$

What is the tax on a purchase of each amount? Do not use a calculator.

$30 $1

Express the following as a fraction, decimal or percent.

a) Fraction: 2/5
Decimal:
Percent:

b) Decimal: 0.25
Fraction:
Percent:

c) Percent: 60%
Fraction:
Decimal:

Express each power as repeated multiplication.

4^3 10^4

Chapter 1

Worksheet #2

1. a) What amount of money is shown? Express your answer in two ways:

□¢ $□

b) Write this amount as a fraction of a dollar. Express the fraction in two ways.

c) Express this amount as a percent of a dollar.

2. Write each fraction in lowest terms.

b) $\frac{3}{9}$

c) $\frac{14}{28}$

d) $\frac{20}{24}$

f) $\frac{8}{8}$

3. This picture of a measuring tape shows 1 foot.

a) How many inches is 1 foot?

b) How many inches is $\frac{1}{2}$ foot?

c) How many inches is $\frac{1}{4}$ foot?

d) What percent of 1 foot is 6 inches?

4. What is the tax on a purchase of each amount? Do not use a calculator.

b) \$2 **c)** \$3 **d)** \$10 **e)** \$20

g) \$100 **h)** \$200 **i)** \$300

5. Copy the table. Determine the missing values.

	Fraction	Decimal	Percent
a)	$\frac{1}{2}$		
b)	$\frac{1}{10}$		
c)		0.35	
d)		0.07	
e)			9%
f)			90%

6. Determine each answer without using a calculator or a calendar.

a) How many weeks are in one year?

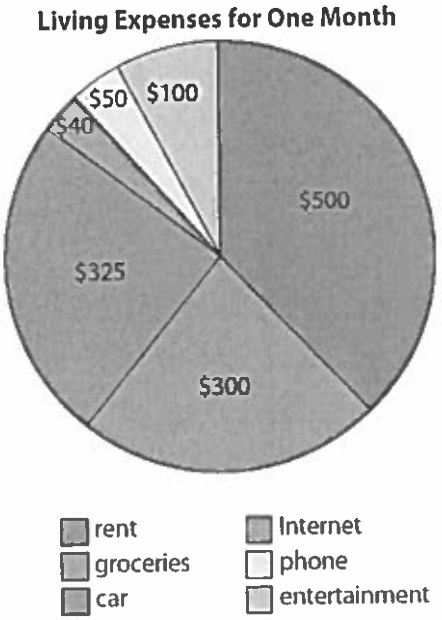
b) How many weeks are in a $\frac{1}{2}$ year?

c) How many seasons are there?

d) How many weeks are in one season?

e) Express your answer to part d) as a fraction of a year, in lowest terms.

7. Diane moved into her own apartment a month ago. The graph shows her living expenses for one month.



a) Approximately what fraction of her expenses did Diane spend on rent?

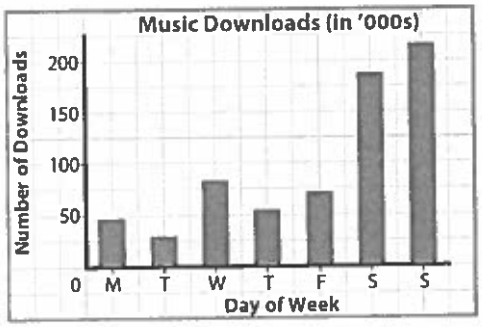
b) Approximately what fraction of her expenses did she spend on her car?

c) What two expenses make up about half of her total expenses?

d) What is the total amount of money that Diane spent last month?

e) Express each of Diane's expenses as a percent of the total.

8. The graph shows the number of music downloads over one week.



a) Explain the meaning of "in '000s."

b) Estimate the number of downloads for each day of the week.

c) Use your answer to part b) to estimate the total number of downloads in one week.

d) Explain the large number of downloads on Saturday and Sunday.

9. Express each power as repeated multiplication.

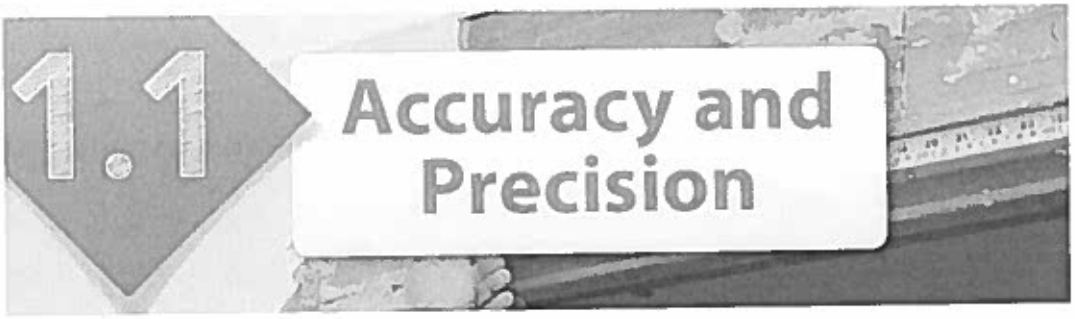
b) 2^4 c) 6^2 e) 3^4

f) 5^3 g) 2^6 h) 10^6

10. Evaluate each part of #9 without using a calculator.

b) 2^4 c) 6^2 e) 3^4

f) 5^3 g) 2^6 h) 10^6



Accuracy:_____

_____

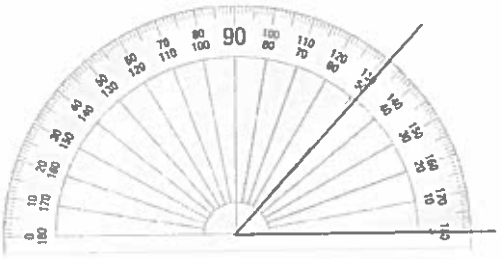
_____

Precision:_____

_____

_____

*You could say that the angle shown measures 48.5°, 49°, or 50°. All of these measurements have **accuracy**, they just vary in their **precision**. If you say that the angle is about 130°, that is not accurate—you are reading the protractor incorrectly.*



On the Job 1

Determining Accuracy

Vic and his son are going to pour a concrete pad before building a shed. They want the pad to be 12 ft long, 8 ft wide, and 4 in. thick.

Vic's son wants to calculate the volume of the concrete needed. He knows that

volume = length × width × height (or thickness).

$$V = lwh$$
$$V = 12 \times 8 \times 4$$
$$V = 392$$

a) Whose calculation is accurate? Explain.

b) Is it important for this calculation to be accurate? Explain.

Your Turn

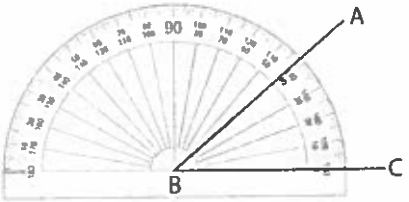
Calculate the volume of concrete needed for a pad that measures 20 ft by 10 ft by 6 in.

Chapter 1

Worksheet #3

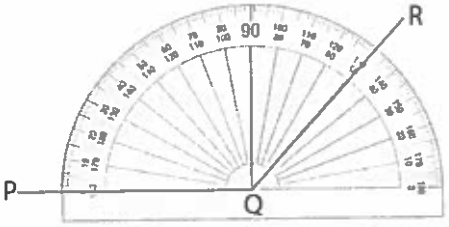
1. Determine whether each angle measurement is accurate.

a)



$\angle ABC = 42°$

b)



$\angle PQR = 59°$

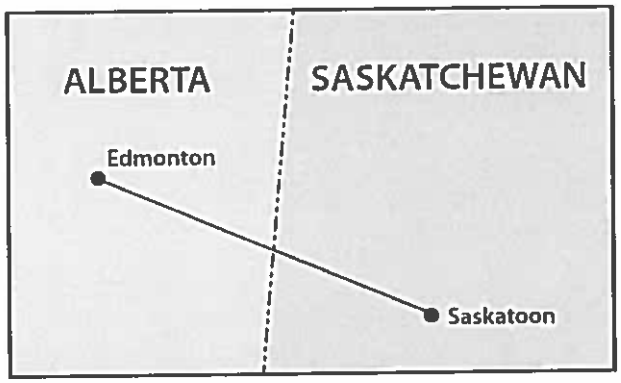
2. Explain why saying that $\angle PQR$ in #1b) equals 130° can be considered accurate.

3. Which is an accurate location of the arrow?

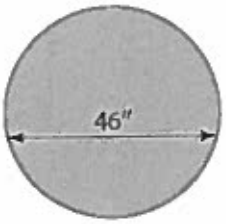
A 7.5 cm **B** 9 cm **C** $7\frac{1}{2}$ in.

4. Explain why the other two given measurements in #3 are not accurate.

5. Joanne is driving from Edmonton, AB, to Saskatoon, SK. What is an accurate estimate of the distance? The scale of the map is 1 cm : 100 km.



7. Chad is going to stain and varnish a table. He says that the diameter of the tabletop is 46 inches. Explain why his measurement is not accurate.



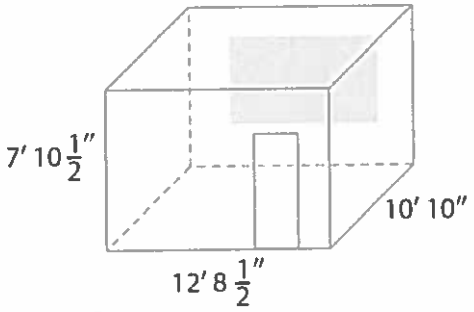
8. Jack estimates that the width of his property is about 60 to 70 metres. He has a measuring wheel and a 10-metre measuring tape. Which measuring tool will likely give Jack the most precise measurement? Explain your reasoning.

On the Job 2

Determining Degree of Precision

Greg is redecorating a bedroom in his house. He knows that his measurements need to be accurate, but the degree of precision required depends on the job.

a) Greg wants to determine how much paint to buy. The dimensions of the room are $12'\ 8\frac{1}{2}''$ by $10'\ 10''$. The ceiling is $7'\ 10\frac{1}{2}''$ high. What degree of precision does he need for the room's measurements? How much paint should he buy?



b) Greg is also replacing the door and window casing. The door frame measures 80" by 30". The door casing will be installed so that about $\frac{1}{8}''$ of the door frame is exposed.
Greg needs to cut the pieces of casing. What degree of precision does he need for the measurements? How long should he cut the pieces of casing?

Chapter 1

Worksheet #4

a) A second bedroom in Greg's house has dimensions that are 10 ft 4 in. by 13 ft 10 in. The ceiling is 7 ft $10\frac{1}{2}$ in. high. He wants to paint the bedroom. How much paint should he buy?

b) A closet door in the bedroom is 80 inches high and 24 inches wide. Determine the length he should cut the horizontal piece of casing that goes across the top of the closet door frame.

Chapter 1

Worksheet #5

1. Measure the lines. State the length of each line to the nearest half inch.

a) 

b) 

c) _____

2. Remeasure the lines from #1.

a) State the length of each line to the nearest sixteenth of an inch.

a) 

b) 

c) _____

b) State the length of each line to the nearest centimetre.

a) 

b) 

c) _____

3. Measure the following angles. State each measure to the nearest 5°.

a)

b)

c)

4. Remeasure the angles from #3. State each measure to the nearest degree.

a)

b)

c)

5. Brett weighs himself in the morning on his bathroom scale. It shows 180 lb. When he gets to the gym, Brett weighs himself again. The scale at the gym says 181.6 lb.

a) What units is each scale using to display mass? Explain how you know.

b) Which scale is more precise? Explain.

c) Explain how both scales could be accurate.

Self Service 141.1

6. a) What precision is usually used when gas stations display the price of a litre of gasoline?

b) Is it possible to pay \$1.411 for exactly 1 litre of fuel? Explain.

c) At the price shown, how much would you pay for exactly 1 litre of gasoline?

d) How much would you pay for exactly 2 litres?

e) If you were to buy exactly 1 litre of gas each day for 10 consecutive days, how much would you pay in total, assuming the price stays the same?

f) How much would you pay for a single purchase of 10 litres of gas?

g) If you make a single purchase of exactly 10 litres of gas, what is the average price per litre?

7. Marci is $5' 6\frac{3}{4}''$ tall.

a) Round Marci's height to the nearest inch.

b) Round Marci's height to the nearest foot.

c) Do you think it is accurate for Marci to tell people that her height is the answer to part a)? Explain.

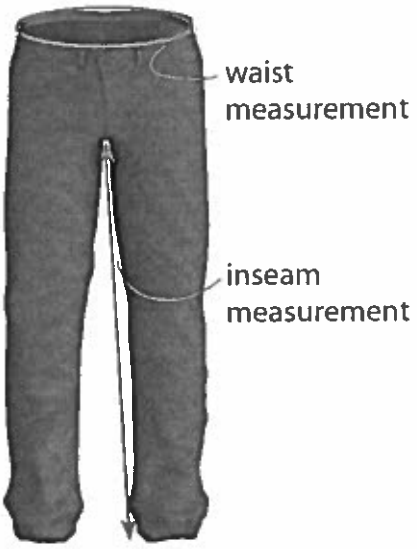
d) Do you think it is accurate for Marci to tell people that her height is the answer to part b)? Explain.

On the Job 3

Tolerance

Tolerance:_____

A clothing manufacturer allows for a certain **tolerance** when making their products. Men's pants are sold in whole-inch sizes by their waist measurement and, often, by their inseam measurement as well. The company allows for a tolerance of $\pm\frac{1}{4}''$ when labelling their products.

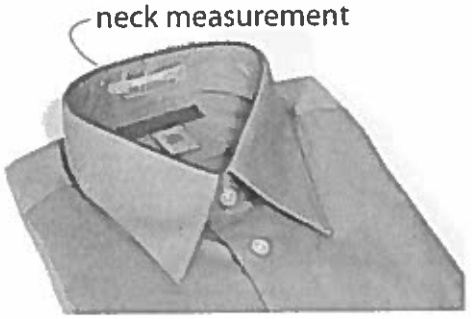


a) What is the tolerance for the waist measurement of a pair of pants?

b) What are the maximum and minimum allowable waist measurements that can be labelled as 32-inch waist pants?

Chapter 1

Worksheet #6



The same manufacturer allows a tolerance for the neck measurement of a men's shirt of $\pm\frac{1}{8}''$. Their men's shirts are sold in $\frac{1}{2}$-inch increments of the neck measurement, for example, $14\frac{1}{2}''$, 15″, $15\frac{1}{2}''$, 16″, and so on.

a) What is the tolerance for the neck measurement of a men's shirt?

b) What are the maximum and minimum allowable measurements that can be sold as a men's shirt with a 15-inch neck?

Chapter 1

Worksheet #7

1. Determine the maximum and minimum allowable measurements.

a) $22'' \pm \frac{1}{4}''$ **b)** $45\ °C \pm 1°$ **c)** $350\ °F \pm 10°$

d) $1\ m \pm 1\ cm$ **e)** $1\ m \pm 1\ mm$ **f)** $5\ lb \pm 0.2\ lb$

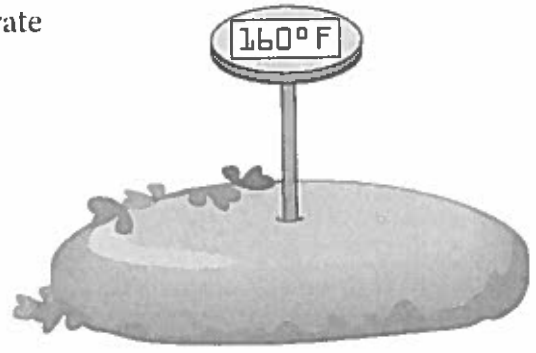
2. For each part of #1, what is the tolerance?

a) $22'' \pm \frac{1}{4}''$ **b)** $45\ °C \pm 1°$ **c)** $350\ °F \pm 10°$

d) $1\ m \pm 1\ cm$ **e)** $1\ m \pm 1\ mm$ **f)** $5\ lb \pm 0.2\ lb$

3. Determine the tolerance if the maximum and minimum allowable measurements for a 100-g product are 95 g and 105 g.

4. A meat thermometer is accurate to $\pm 2°$. What range of temperatures could the interior temperature of the burger be?



5. A machine shop that manufactures nuts and bolts allows a tolerance of ±0.01 mm.

a) What are the maximum and minimum diameters of a 6-mm bolt?

b) The corresponding nut has an inside diameter of 6.1 mm, ±0.01 mm. What are the maximum and minimum allowable inside diameters of the nut?

c) What is the greatest possible difference between the diameter of the bolt and the nut? Explain.

d) What is the least possible difference between the diameter of the bolt and the nut?

e) Explain why the nut cannot be manufactured with an inside diameter of 6 mm.

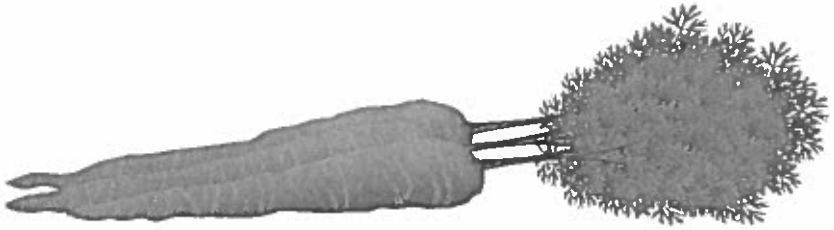
6. Most breakfast cereals are sold by mass, not by volume. A 350-g package is allowed to have a tolerance of ±3 g. What is the acceptable range of masses for a cereal package?

7. A kitchen scale is accurate to ±10 g. Jodie places a 350-g package of breakfast cereal on her scale. The scale reads 345 g.

   a) Can you tell if Jodie's scale is accurate? Explain.

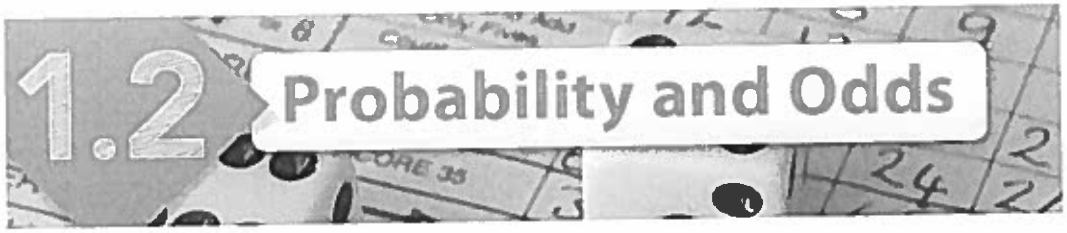
   b) Is her scale likely to be as precise as the machines in the cereal factory? Explain.

8. The information on a package of carrot seeds says that the carrots, under normal growing conditions, will grow to a length of 6 inches to 8 inches.



   a) What do you think is the average length of the carrots? Explain.

   b) Express the likely length of each carrot using the ± symbol.



Probability: _____

Probability = Number of favourable outcomes
Total number of out

What is the probability of rolling a "2" on a die

Probability can be written as a fraction, decimal or percent.

What are all of the possible combinations for rolling two dice? (Worksheet)

Which total has the greatest likelihood of occurring?

What is the probability of this total occurring? Express your answer as a fraction and as a percent.

On the Job 1

Calculate Probability

A fisheries officer needs to measure the length of three different kinds of fish: pike, trout, and whitefish. The lake has been stocked with 250 fish.

- 25 fish are pike.
- 75 fish are trout.
- 100 fish are whitefish.

The officer catches the first fish to be measured. What is the probability that the fish is

Express each answer in four ways: fraction, decimal, percent, and words.

a) a pike?

b) a trout?

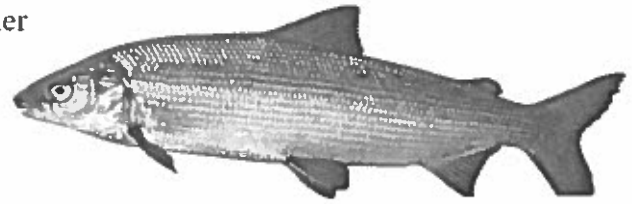
c) a whitefish?

d) any one of these three kinds of fish?

Your Turn

You are fishing in another lake that has a stocked population of 360 fish.

- 162 fish are whitefish.
- 108 fish are trout.



What is the probability that one of the fish you catch is

a) either of these two kinds of fish?

b) a trout?

Chapter 1

Worksheet #8

1. **a)** What is the probability of rolling a total of 9 with two dice? Express your answer as a fraction.

b) Rolling a sum of 3 has the same probability as rolling what other number?

2. A standard deck has 52 cards. If you choose one card, what is the probability of choosing

Express each answer as a fraction and as a percent.

a) a red card?

b) a club?

c) a queen?

3. Part of a meteorologist's job is to predict the probability of precipitation (POP). In Gander, NL, one day the POP is 60%. What is this probability in words, as a fraction, and as a decimal?

4. A new medication for migraines has come on the market.

a) The medication causes serious side effects in 2 of 100 patients. Express this probability as a fraction, a decimal, and a percent.

b) The medication is 90% effective. Express this probability in words, as a fraction, and as a decimal.

c) Melanie has a migraine once a year. Should she take the medication? Explain why or why not.

d) Ian has a migraine twice a month. Should he take the medication? Explain why or why not.

5. Manufacturers need to determine the probability of their products failing. The chart shows a standard way of ranking probabilities of failure.

Probability of Failure	Ranking
more than 1 in 2	Very high: failure almost inevitable
1 in 3	
1 in 8	High: repeated failures
1 in 20	
1 in 80	Moderate: occasional failures
1 in 400	
1 in 2000	
1 in 15 000	Low: relatively few failures
1 in 150 000	
fewer than 1 in 1 500 000	Remote: failure is unlikely

a) A car part has a failure probability of 1 in 2000. What is the failure ranking? What is this probability as a decimal and a fraction?

b) An electronic part in a television has a failure probability of 12.5%. What is the failure ranking? What is this probability in words?

On the Job 2

Calculate Odds

Odds:

Odds = Number of favourable outcomes : Number of unfavourable outcomes

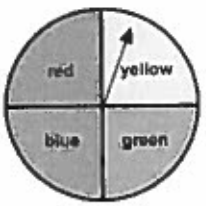
What are the Odds of rolling a "1" on a die?

If a bag contains 3 red marbles, 4 blue marbles and 5 green marbles, what are the odds of choosing a red marble?

Tree Diagram:

Create a tree diagram of tossing two coins

Create a tree diagram of tossing a coin and spinning a spinner with three equal sections of blue, green, red and yellow.



Chapter 1

Worksheet #11

1. A standard deck has 52 cards. What are the odds of choosing

a) the 7 of spades? b) a queen? c) a club? d) a red card?

2. You have one six-sided die. What are the odds of rolling

a) a 2? b) a 5 or a 6? c) an odd number? d) any number but a 3?

3. A bag holds 10 coloured marbles. Of the marbles, 6 are red, 3 are blue, and 1 is green. What are the odds of

a) selecting the green marble? b) selecting a blue or a green marble?

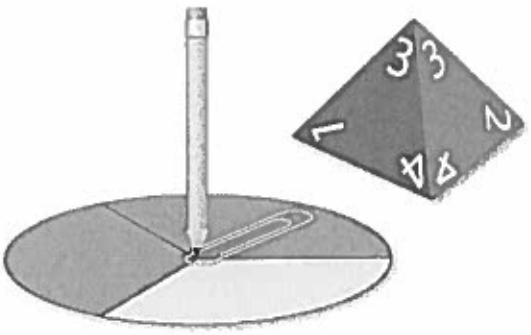
c) selecting a red marble? d) not selecting a blue marble?

4. Rhys flips two coins at the same time.

a) What are the odds that he gets one head and one tail?

b) What is the probability that he gets one head and one tail?

5. A board game involves rolling a four-sided die, and then spinning a spinner with three equal sectors, coloured red, yellow, and blue.



a) Construct a tree diagram to display all of the outcomes.

b) How many total outcomes are there?

c) What is the probability of each outcome?

d) What are the odds of each outcome?

6. Sixteen contractors are chosen to present their proposals for building a new civic centre. The order of the presentations is determined by a random draw. The first name drawn presents first, the second one drawn presents second, and so on.

a) What are the odds of being the first presenter?

b) What are the odds of being the second presenter?

c) What are the odds of being the second-last presenter?

1.3 Theoretical and Experimental Probability

Theoretical Probability:

Experimental Probability:

On the Job 1

Understand Probabilities

A gasoline retailer runs a promotion with a 1 in 7 chance of winning a prize with each purchase. Kevin makes a purchase.

a) Calculate Kevin's chance of winning, to the nearest percent.

b) Are the odds of winning in Kevin's favour? Explain.

c) What is the probability of Kevin not winning?

d) How many purchases would guarantee Kevin winning a prize?

Chapter 1

Worksheet #14

1. You flip a coin once.

   a) What is the probability of getting tails?

   b) What are the odds against getting tails?

   c) You do not get tails. If you flip again, will you get tails?

2. You flip a coin 80 times.

   a) Theoretically, how many tails should you get?

   b) In an actual experiment, how many tails would you get?

3. You roll two dice.

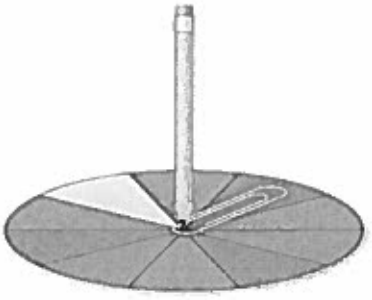
   a) What is the probability of rolling a sum of 5 or less?

   b) What is the probability of rolling a sum that is an even number?

   c) What are the odds of rolling a sum that is an even number?

   d) What are the odds against rolling a sum of 10 or more?

4. A spinner is divided into 10 sections. Write each answer as a fraction and as a percent. State the probability of the spinner



a) landing on yellow

b) landing on red

c) landing on green

d) landing on blue **e)** landing on yellow or blue **f)** not landing on blue

5. a) You draw a card from a standard deck of 52 cards. As a fraction, what is the probability of drawing the 7 of clubs?

b) Express the probability in part a) to the nearest percent.

c) You draw the 10 of diamonds and do not replace it in the deck. What is the probability of drawing the 7 of clubs on your next try?

d) Express the probability in part c) to the nearest percent.

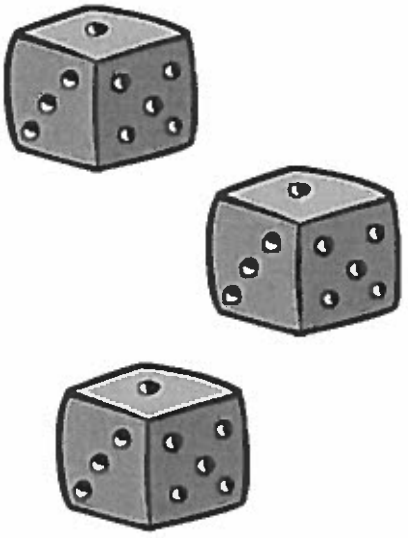
e) How many cards do you need to draw from the deck and not replace before the rounded percent of drawing the 7 of clubs changes to a different percent?

6. A standard deck of 52 cards has four suits: spades, hearts, diamonds, and clubs.

a) You select a card from a deck. What is the probability of drawing a spade?

b) What do you predict the results would be if you repeated the experiment in part a) 40 times?

8. You have three dice.



a) What is the total number of outcomes?

b) List all of the combinations of rolling a sum of 7.

c) What is the probability of rolling a sum of 7?

On the Job 2

Interpret Probabilities

Jana loves to go out with her friends for coffee. Their favourite coffee shop is having a promotion. A prize is awarded in 1 out of every 9 coffee cups. Jana has won on 3 of her first 4 purchases.

a) What is the theoretical probability of winning, expressed as a percent?

b) Should Jana have won with her first cup? Explain.

c) What about her second cup? Explain.

d) Will Jana win next time?

e) Currently, what percent of the time is she winning?

f) Explain how Jana could win 3 times in a row.

Your Turn

Jana's friend, Laura, has not had a winning cup in her first 4 purchases.

a) What is the probability of not winning, expressed as a percent?

b) If Laura buys 9 cups of coffee, should she get 1 win? Explain.

c) Will Laura get 1 win in her first 9 cups?

d) Should Laura expect to win next time?

Chapter 1

Worksheet #15

1. List the following contest winning results from most successful to least successful.
   a) 1 winning outcome in 5 tries
   b) 3 winning outcomes in 13 tries
   c) 6 winning outcomes in 25 tries
   d) 4 winning outcomes in 19 tries
   e) 7 winning outcomes in 33 tries
   f) 5 winning outcomes in 19 tries

2. A department store has a promotion involving scratch-and-win cards. You play 5 cards and win once.

   a) What percent of the time did you win?

   b) You find out that the odds of winning are 1 in 5. What is the probability of winning?

   c) Did you do better or worse than the odds of winning?

3. You flip a coin once and get heads. You flip it a second time and get heads again. What is the probability of getting tails when you flip the coin a third time?

5. Place each letter of the alphabet on a separate tile or piece of paper. Put the items in a container or bag.

a) As a fraction, what is the probability of drawing a vowel from the container on your first attempt? Consider Y to be a vowel.

b) Express the answer to part a) as a percent.

c) Imagine you select a tile from the container, record the result, and then replace the tile. How many times would you expect to draw a vowel if you selected 26 times?

d) How many times would you expect to draw a vowel if you selected 50 times?

6. Alisha and her family are playing Monopoly™. It is her turn to roll the two dice. She needs to roll 5 or greater to avoid landing at her sister's houses. What is the probability that Alisha will avoid her sister's houses?

On the Job 1

Work With Precision of Probabilities

You work at a factory that makes CFLs (compact fluorescent lights). You analyse a recent batch of a new type of bulb. Your analysis shows that the number of defective light bulbs in the batch is about 1 in 36.

a) Express the defect rate as a percent to five decimal places and to the nearest percent.

b) Your plant makes 1 000 000 of the light bulbs. Using the two defect rates from part a), calculate the potential number of defective light bulbs. What is the difference between the two results?

c) Which degree of precision do you think the manager of the factory would want to see? Explain your reasoning.

Your Turn

Jay is ordering boards from a lumberyard. About 1 in 7 boards at the lumberyard are warped.

a) What percent of the boards are warped? Express your answer to five decimal places and to the nearest percent.

b) Jay orders 300 boards from the lumberyard. Using the two defect rates from part a), calculate the potential number of warped boards Jay will receive. What is the difference between the two results?

c) To which degree of precision do you think Jay would want to know the probability of a board being warped? Explain your reasoning.

Chapter 1

Worksheet #18

1. What are the odds of obtaining success in the following experiments?

a) flipping a coin and it lands heads up **b)** rolling one die and the number 3 is facing up

c) cutting a deck of cards and getting a heart

d) rolling one die and an odd number is facing up

2. What results would you expect from each experiment?

a) You flip a coin 50 times.

b) You roll one die 60 times. How many 3s would you get?

c) You cut a deck of cards 40 times. How many hearts would you get?

d) You roll one die 80 times. How many times would you roll an odd number?

3. Calculate each probability as a percent, to five decimal places, and to the nearest percent.

a) a 1 in 6 chance of a car collision over a 10-year period

b) a 1 in 11 chance of a hurricane making landfall

c) a 1 in 9 chance of a certain model of car needing brakes repaired within 3 years

d) 1 in 10 000 patients experiencing side effects from a certain medical treatment

4. Calculate the success rate of the following results. Express each rate as a fraction in lowest terms.

a) You want heads. You flip a coin 50 times and get heads 30 times.

b) You want 3s. You roll a die 60 times and get a 3 five times.

c) You want hearts. You cut a deck of cards 40 times and get 6 hearts.

d) You want odd numbers. You roll a die 80 times and get 37 odd numbers.

5. Convert each answer to #4 to a percent. Round each percent to the degree of precision you think is appropriate.

a)

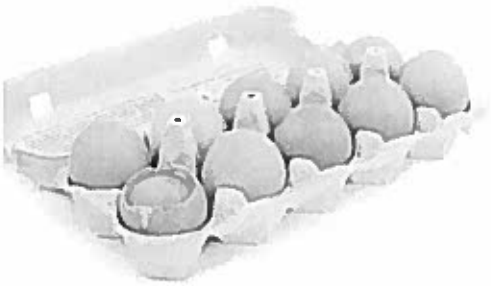
b)

c)

d)

6. Reena and some friends are building a fence in her backyard. Reena determines that she needs 240 fence boards. About 90% of the fence boards at the lumberyard are straight enough to use. How many fence boards should Reena order?

8. There are many steps involved in getting the egg from the hen to the refrigerator in a supermarket. Sometimes, eggs break. The manager of a supermarket says that about 1 in 250 eggs breaks.



a) Are you likely to find a broken egg inside a carton of a dozen eggs?

b) About how many dozen eggs would you likely need to inspect before finding a broken one?

c) Nancy says that she always checks the egg carton before buying eggs because she sees "lots of broken ones." Do you think that her claim is likely to be true? Explain why or why not.

On the Job 2

Make Decisions Based on Probabilities

Make Decisions Based on Probabilities

The owner of a paving company routinely checks weather forecasts to schedule jobs. Dry, sunny weather is the best for laying down asphalt. Below is a six-day forecast from a weather web site.

	Monday Sept. 13	Tuesday Sept. 14	Wednesday Sept. 15	Thursday Sept. 16	Friday Sept. 17	Saturday Sept. 18
	Cloudy With Sunny Breaks	Rain	Isolated Showers	Mostly Sunny	Sunny	Sunny
P.O.P.	40%	90%	60%	20%	20%	10%
High	18 °C	16 °C	17 °C	18 °C	21 °C	22 °C
Low	11 °C	13 °C	9 °C	14 °C	16 °C	18 °C
24-Hr Rain	close to 1 mm	close to 20 mm	1–3 mm			

a) What does P.O.P. stand for?

b) Explain what P.O.P. means.

c) How can P.O.P. help the owner of the paving company?

d) List the best days for paving during the week shown.

Chapter 1

Worksheet #19

Your Turn

Refer to the six-day forecast above. You have planned an outdoor family picnic for September 18.

a) How would you advise family members about the probability of precipitation?

b) What would you advise family members to wear?

Chapter 1

Worksheet #20

1. a) Expressed as a percent, what is the probability of something that will happen *for certain*?

b) Expressed as percents, what is the range of probabilities of something that is *likely* to happen?

2. Respond to the statements in parts a) to j) with one of the following:

A It will happen.
B It is likely to happen.
C It is equally likely and unlikely to happen.
D It is not likely to happen.
E It will not happen.

Explain your reasoning in each case.

a) The next person to walk into your classroom will be left-handed.
b) The next person to walk into your classroom will have brown eyes.
c) The sun will rise tomorrow morning.
d) It will snow in Mexico City this afternoon.
e) The next person you speak to on the phone will be female.
f) The next person you text will be male.
g) If you flip four coins at once, they will all land heads up.
h) If you flip two coins at once, they will both land heads up.
i) The moon will be visible tomorrow morning.
j) The Toronto Maple Leafs will win the Stanley Cup in your lifetime.

3. Four fast-food restaurants are having contests. The chance of winning is different for each one.

Top Burgers: 1 in 20 probability of winning
Pizza Perfect: 56 in 60 probability of not winning
Chicken Kwik: 1 to 20 odds of winning
Real Meal: 94 to 6 odds of not winning

Which contest gives you the greatest chance of winning?

Unit 1: Measurement and Probability

Worksheet #21

Career Links

Name **5 careers** which we have talked about this unit that would use measurement or probability. Explain what topic would have to be used.

1. _____
_____
_____

2. _____
_____
_____

3. _____
_____
_____

4. _____
_____
_____

5. _____
_____
_____