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4a) Look at the chart below. It shows the measurements of the sides of a triangle. Determine the perimeter of each triangle. Then, find the perimeter of each triangle if the measurements of each side are doubled.



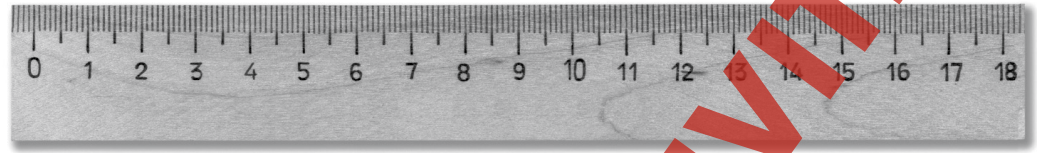
Triangle	Side 1	Side 2 (base)	Side 3	Height	Perimeter	Perimeter if sizes are doubled
i)	3 in (7.5 cm)	6 in (15 cm)	8 in (20 cm)	4 in (10 cm)		
ii)	1.5 in (4 cm)	3.5 in (9 cm)	1.5 in (4 cm)	2.8 in (7 cm)		
iii)	2 in (5 cm)	1.3 in (3 cm)	2.8 in (7 cm)	2 in (5 cm)		
iv)	2 in (5 cm)	7 in (17.8 cm)	12 in (30.5 cm)	8 in (20 cm)		
v)	2.8 in (7 cm)	5 in (12.5 cm)	2.5 in (6 cm)	4.3 in (11 cm)		
vi)	2.5 in (6 cm)	1.5 in (4 cm)	3.3 in (8.5 cm)	1.8 in (4.5 cm)		
vii)	2.2 in (5.5 cm)	1.5 in (4 cm)	4.7 in (12 cm)	3.7 in (9.5 cm)		
viii)	3 in (7.5 cm)	7 in (17.8 cm)	8 in (20 cm)	3 in (7.5 cm)		
ix)	1 in (2.5 cm)	2.5 in (6 cm)	1.3 in (3 cm)	3 in (7.5 cm)		
x)	1.5 in (4 cm)	3.3 in (8.5 cm)	2.5 in (6 cm)	3.2 in (8 cm)		
xi)	3 in (7.5 cm)	6 in (15 cm)	10 in (25.5 cm)	5 in (12.5 cm)		
xii)	1.5 in (4 cm)	3.7 in (9.5 cm)	4.7 in (12 cm)	3.5 in (9 cm)		
xiii)	3.5 in (9 cm)	1.8 in (4.5 cm)	3.2 in (8 cm)	2.5 in (6 cm)		
xiv)	3 in (7.5 cm)	7.5 in (19 cm)	3 in (7.5 cm)	5 in (12.5 cm)		
xv)	6 in (15 cm)	9 in (23 cm)	12 in (30.5 cm)	5 in (12.5 cm)		



Redo the activity above by finding the area of each triangle. Then, find the area of each triangle if the measurements of each side and height are doubled.



15a) Use a ruler to draw the following plane figure (or 2 dimensional) shapes for each perimeter given. For each perimeter, draw 3 different shapes that equal that measurement.



- i) Perimeter = 2 inches
Shape 1 _____ Shape 2 _____ Shape 3 _____
- ii) Perimeter = 2.5 inches
Shape 1 _____ Shape 2 _____ Shape 3 _____
- iii) Perimeter = 3 inches
Shape 1 _____ Shape 2 _____ Shape 3 _____
- iv) Perimeter = 4 inches
Shape 1 _____ Shape 2 _____ Shape 3 _____
- v) Perimeter = 5 inches
Shape 1 _____ Shape 2 _____ Shape 3 _____
- vi) Perimeter = 4.5 inches
Shape 1 _____ Shape 2 _____ Shape 3 _____



2a) Convert the following standard measurements.



- Ex: 5 g = 40 p
- i) 12 c = _____ q
 - ii) 60 q = _____ g
 - iii) 2.5 p = _____ c
 - iv) 9 q = _____ g
 - v) 12.5 g = _____ q
 - vi) 16 p = _____ c
 - vii) 22 q = _____ g
 - viii) 18 g = _____ p
 - ix) 32.5 p = _____ c
 - x) 15 q = _____ g
 - xi) 29 c = _____ q
 - xii) 7.25 g = _____ q
 - xiii) 19.5 c = _____ p

b) Convert the following metric measurements.

- i) 2 L = _____ kL
- ii) 50 mL = _____ L
- iii) 300 L = _____ kL
- iv) 9.5 kL = _____ L
- v) 32.5 L = _____ mL
- vi) 2.5 kL = _____ mL
- vii) 0.5 L = _____ mL
- viii) 2.6 L = _____ kL
- ix) 5,216 L = _____ kL
- x) 1300 mL = _____ L
- xi) 50.26 L = _____ kL
- xii) 8.23 kL = _____ mL
- xiii) 0.075 kL = _____ L
- xiv) 22,000 mL = _____ L
- xv) 18.5 L = _____ kL



14a) The calendar below shows the daily high and low temperatures in Carver City for a five day period in July. Read the information, then answer the questions that follow.



Monday	Tuesday	Wednesday	Thursday	Friday
High: 75.6°F (24.2°C) Low: 58.3°F (14.6°C)	High: 77.2°F (25.1°C) Low: 56.8°F (13.8°C)	High: 77.9°F (25.5°C) Low: 52.5°F (11.4°C)	High: 78.4°F (25.8°C) Low: 60.3°F (15.7°C)	High: 72.7°F (22.6°C) Low: 54.8°F (12.7°C)

i) Calculate the difference between the high and low temperatures for each day.

Day:	Monday	Tuesday	Wednesday	Thursday	Friday
Difference:					

- ii) What is the average high for the week? _____
- iii) What is the average low for the week? _____
- iv) What is the mean temperature for each day? _____

Day:	Monday	Tuesday	Wednesday	Thursday	Friday
Mean:					

- v) What day has the greatest difference between high and low? _____
- vi) What day has the smallest difference between high and low? _____
- vii) What is the difference between the highest and lowest temperature during the week? _____

Explore With Technology

Find the high and low temperatures for the previous week for your own city and fill out the chart below accordingly.

Day:	Monday	Tuesday	Wednesday	Thursday	Friday
High:					
Low:					
Difference:					
Mean:					



Review A

a) Convert the following measurements.

- i) 20 ft = _____ in ii) 480 mm = _____ cm iii) 176 oz = _____ lbs
 iv) 500 m = _____ km v) 72 ft = _____ yd vi) 7.5 kL = _____ L
 vii) 128 qts = _____ gallons viii) 2.5 m = _____ cm ix) 45 ft = _____ yd
 x) 7 km = _____ mm xi) 4.5 cup = _____ pt xii) 12 L = _____ mL
 xiii) 18.5 ft = _____ in xiv) 29.7 g = _____ mg xv) 25 lbs = _____ oz

b) Answer the following quick measurement questions.

- i) Jaime measured the temperature of a warm liquid. The temperature started at 72°F (22°C) and dropped 2.5 degrees every minute for three minutes. What was the temperature of the liquid after 3 minutes?

- ii) A rectangle had an area of 2.5 square inches (16 square cm). What are two possible combinations for the length and width of the rectangle?


- iii) Tyrone ran a 5 mile (8 km) race. How many total feet (meters) did he run?

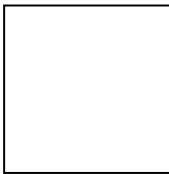
- iv) If a car weighs 2.5 tons, how many pounds (kilograms) does it weigh?

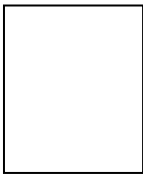
- v) A triangle has a base of 6 inches (150 mm) and a height of 1 inch (25.5 mm). What is the area of the triangle?

- vi) What is the perimeter of a square with a side measuring 3.5 inches (9 cm)?

c) Use a ruler to measure the objects below. Find the area for each object.

i)  Area = _____

ii)  Area = _____

iii)  Area = _____



Review B

a) Convert the following measurements.

- i) 2.57 cm = _____ mm ii) 4.5 ft = _____ in iii) 12.5 gal = _____ cups
 iv) 5.5 km = _____ cm v) 24 oz = _____ lbs vi) 0.5 kL = _____ L
 vii) 138 in = _____ ft viii) 175 mm = _____ cm ix) 30 qt = _____ gallons
 x) 19.27 mg = _____ g xi) 28.5 oz = _____ lbs xii) 29.25 kg = _____ g
 xiii) 22.5 ft = _____ in xiv) 0.025 kL = _____ L xv) 2.5 tons = _____ oz

b) Answer the following quick measurement questions.

- i) Carlos measured the temperature on a cold winter day at -3°F. What was the temperature in Celsius?

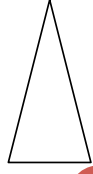
- ii) A regular pentagon has a perimeter of 12 inches (30.5 cm). What is the measure of each side?

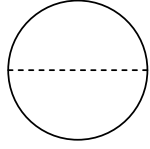
- iii) Dionne weighed herself and determined she was 85.25 pounds (38.67 kilograms). How many ounces (grams) did she weigh?

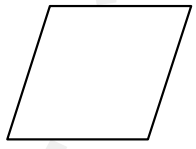
- iv) Wan took a car trip with his family. They traveled close to 158.5 miles (255 km) before arriving at their destination after three days. What was the average amount of miles (km) they traveled each day?

- v) A box has a length of 3 inches (8 cm), width of 2 inches (5 cm), and a height of 2.5 inches (7 cm). What is the volume of the box?

c) Use a ruler to measure the objects below. Find the perimeter or circumference for each object.

i)  Perimeter = _____

ii)  Circumference = _____

iii)  Perimeter = _____



Review C

a) Convert the following measurements.

- i) 18.3 yd = _____ ft ii) 1.28 cm = _____ mm iii) 0.25 tons = _____ lbs
 iv) 1.025 m = _____ mm v) 198 oz = _____ lbs vi) 7.5 g = _____ kg
 vii) 144 qt = _____ gal viii) 1.25 km = _____ cm ix) 40.3 ft = _____ in
 x) 27.55 kg = _____ g xi) 24.5 ft = _____ yds xii) 4.25 km = _____ m
 xiii) 25.25 g = _____ mg xiv) 8.25 ft = _____ in xv) 0.028 kL = _____ L

b) Answer the following quick measurement questions.

- i) Steven measured the length of time it took for a science experiment to be completed. After three trials, his times were 18.25 seconds, 16.75 seconds, and 15.27 seconds. What was the average time for the experiments to be completed?


- ii) A parallelogram has an area of 4.2 sq. in (27 sq. cm). What are two possible base and height measurements?

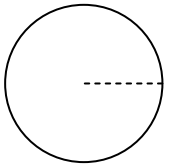
- iii) Diego rode a bike for three consecutive days. He averaged 25.25 miles (40.6 km) each day. How many total feet (meters) had he traveled after three days?

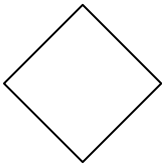
- iv) A rectangular box has a length of 3 inches (8 cm), a width of 2 inches (5 cm), and a height of 0.8 inches (2 cm). What is the surface area?

- v) The radius of a circle is 5 inches (12.5 cm). What is the area of the circle?

c) Use a ruler to measure the objects below. Find the area, perimeter and circumference for each object.

i)  Area = _____ Perimeter = _____

ii)  Area = _____ Circumference = _____

iii)  Area = _____ Perimeter = _____

Area of a Circle

Look at the picture of the circle below. Discuss how you can determine the area and perimeter of the circle. Then, in a well developed paragraph, explain how to find the area. Finally, measure the circle and find the area and perimeter.



Things to consider in your answer:

1. What measurements will you need?
2. What units of measure will you use?
3. How do the measurements you need relate to each other?

Things to consider in your paragraph:

1. Make sure to include a topic sentence and conclusion.
2. Make sure your paragraph contains at least five sentences.
3. Make sure to use transition words to help explain your work.

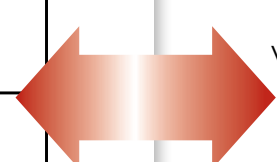
NAME: _____



9a) Listed below in the first column are the formulas that are used to determine the area, surface area, or perimeter of different shapes. Write the shape that each formula represents in the second column. Then, using a ruler, draw a sample of each shape using inches or centimeters. Determine the area or perimeter for each shape you draw.

Formula	Shape it may represent	Sample Shape	Area	Perimeter
Ex: $P = 4 \text{ side}$	Square		$A = s^2$ $A = (0.8 \text{ in}/2 \text{ cm})^2$ $A = 0.64 \text{ sq. in}/$ 4 sq. cm	$P = 4 (0.8 \text{ in}/2 \text{ cm})$ $P = 3.2 \text{ in}/8 \text{ cm}$
i) $A = \frac{1}{2} b \times h$				
ii) $P = 3s$				
iii) $A = l \times w$				
iv) $P = 5s$				
v) $A = \pi r^2$				
vi) $P = 2l + 2w$				
vii) $A = s^2$				
viii) $P = 6s$				
ix) $A = 6a^2$				

EASY MARKING ANSWER KEY



9.

a)

- i) Triangle or Parallelogram
- ii) Triangle
- iii) Quadrilateral
- iv) Pentagon
- v) Circle
- vi) Quadrilateral
- vii) Square
- viii) Hexagon
- ix) Cube

Shapes will vary.
Areas and Perimeters will vary.

15

10.

a)

- i) Perimeter = 5.2 in (12 cm),
Area = 1.69 sq in (9 sq cm)
- ii) Perimeter = 4.2 in (10 cm),
Area = 1.04 sq in (6 sq cm)
- iii) Perimeter = 4 in (10 cm),
Area = 1 sq in (6.25 sq cm)
- iv) Perimeter = 5.2 in (12 cm),
Area = 4.4 sq in (10.6 sq cm)
- v) Perimeter = 3 in (7.4 cm),
Area = 0.28 sq in (1.7 sq cm)
- vi) Perimeter = 5.2 in (13 cm),
Area = 1.6 sq in (10 sq cm)
- vii) Answers will vary.
- viii) Answers will vary.

16

11.

Answers may vary.

17

a)

- i) 12 ft = 144 in
- ii) 0.5 yd = 1.5 ft
- iii) 72 in = 2 yds
- iv) 7.5 ft = 2.5 yds
- v) 2.5 yds = 90 in
- vi) 21 ft = 252 in
- vii) 78 in = 6.5 ft
- viii) 30 yds = 1080 in
- ix) 3.3 yd = 118.8 in
- x) 42 in = 3.5 ft
- xi) 16 in = 1.3 ft
- xii) 26.5 yds = 79.5 ft
- xiii) 3 m = 3,000 mm
- xiv) 2.5 cm = 250 mm
- xv) 19 cm = 190 mm
- xvi) 14 m = 1400 cm
- xvii) 855 mm = 0.855 m
- xviii) 9.5 cm = 0.095 m
- xix) 326 mm = 32.6 cm
- xx) 29 cm = 290 mm
- xxi) 25 cm = 0.25 m
- xxii) 1890 mm = 189 cm

18

13.

a)

- i) 22 sq in (137.5 sq cm)
- ii) 184 sq in (1150 sq cm)
- iii) 192 sq in (1200 sq cm)
- iv) 117 sq in (765 sq cm)
- v) 324 sq in (2025 sq cm)
- vi) 9.5 sq in (58 sq cm)
- vii) 1398 sq in (8969 sq cm)
- viii) 27 sq in (175 sq cm)
- ix) 802 sq in (5118 sq cm)
- x) 300 sq in (1924 sq cm)
- xi) 216 sq in (1350 sq cm)
- xii) 192 sq in (1200 sq cm)
- xiii) 304 sq in (1900 sq cm)
- xiv) 52 sq in (325 sq cm)
- xv) 365 sq in (2334 sq cm)
- xvi) 51.5 sq in (328 sq cm)
- xvii) 5.5 sq in (33 sq cm)
- xviii) 351 sq in (2250 sq cm)
- xix) 184.5 sq in (1148 sq cm)
- xx) 220 sq in (1387.5 sq cm)

19