

NAME

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PERIOD

Unit 3, Lesson 1: The Burj Khalifa Choose TWO from 1-4

1. An elevator travels 310 feet in 10 seconds. At that speed, how far can this elevator travel in 12 seconds? Explain your reasoning.

Find unit rate

372 feet

Feet	Seconds
310	10
31	1
372	12

$\div 10 \rightarrow 310 \rightarrow 31$
 $\times 12 \rightarrow 31 \rightarrow 372$
 $\div 10 \rightarrow 10 \rightarrow 1$ or $\times \frac{1}{10}$
 $\times 12 \rightarrow 1 \rightarrow 12$

2. Han earns \$33.00 for babysitting 4 hours. At this rate, how much will he earn if he babysits for 7 hours? Explain your reasoning.

Find unit rate

\$ 57.75

\$	Hours
33.00	4
8.25	1
57.75	7

$\div 4 \rightarrow 33.00 \rightarrow 8.25$
 $\times 7 \rightarrow 8.25 \rightarrow 57.75$
 $\div 4 \rightarrow 4 \rightarrow 1$
 $\times 7 \rightarrow 1 \rightarrow 7$

3. The cost of 5 cans of dog food is \$4.35. At this price, how much do 11 cans of dog food cost? Explain your reasoning.

Find unit rate

\$ 9.57

Cans	\$
5	4.35
1	.87
11	9.57

$\div 5 \rightarrow 5 \rightarrow 1$
 $\times 11 \rightarrow 1 \rightarrow 11$
 $\div 5 \rightarrow 4.35 \rightarrow .87$
 $\times 11 \rightarrow .87 \rightarrow 9.57$

4. A restaurant has 26 tables in its dining room. It takes the waitstaff 10 minutes to clear and set 4 tables. At this rate, how long will it take the waitstaff to clear and set all the tables in the dining room? Explain or show your reasoning.

Find unit rate

65 minutes

Tables	Minutes
26	10
4	2.50
65	65

$\div 4 \rightarrow 26 \rightarrow 4$
 $\times 26 \rightarrow 4 \rightarrow 26$
 $\div 4 \rightarrow 10 \rightarrow 2.50$
 $\times 26 \rightarrow 2.50 \rightarrow 65$

5. A sandwich shop serves 4 ounces of meat and 3 ounces of cheese on each sandwich. After making sandwiches for an hour, the shop owner has used 91 combined ounces of meat and cheese.

Whole Part Part

a. How many combined ounces of meat and cheese are used on each sandwich?

M	C	Total
4	3	7

7 ounces total

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b. How many sandwiches were made in the hour?

13 sandwiches

c. How many ounces of meat were used?

52 ounces

d. How many ounces of cheese were used?

39 ounces

M	C	Total
4	3	7
52	39	91
		13
		4

(from Unit 2, Lesson 16)

6. Here is a flower made up of yellow hexagons, red trapezoids, and green triangles.

a. How many copies of this flower pattern could you build if you had 30 yellow hexagons, 50 red trapezoids, and 60 green triangles?

5 copies

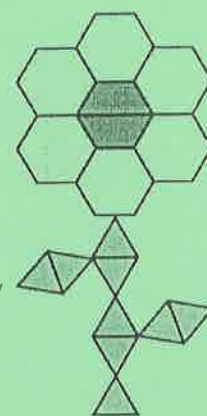
b. Of which shape would you have the most left over?

Red Trap
 $50 - 10 = 40$

H	Trap	Tri
6	2	9
36	12	54
30	10	45

$30 \div 6 = 5$
 $10 \div 2 = 5$
 $45 \div 9 = 5$

(from Unit 2, Lesson 14)







7. Match each quantity in the first list with an appropriate unit of measurement from the second list.

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- 4 A. the perimeter of a baseball field ^{1D}
outside  length \rightarrow meters
- 5, or 6 B. the area of a bed sheet ^{2D}
 \rightarrow square feet or square inches
- 2 C. the volume of a refrigerator ^{3D}
 cubic feet
- 6 D. the surface area of a tissue box ^{2D}
 square in
- 1 E. the length of a spaghetti noodle ^{1D}
 centimeters
- 3 F. the volume of a large lake ^{3D}
 cubic kilometers
- 7 G. the surface area of the the moon ^{2D}
 square kilometers

(from Unit 1, Lesson 16)

- 1. centimeters (cm)
- 2. cubic feet (cu ft)
- 3. cubic kilometers (cu km)
- 4. meters (m)
- 5. square feet (sq ft)
- 6. square inches (sq in)
- 7. square kilometers (sq km)

↙

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2 possible bonus