

NAME \_\_\_\_\_

DATE \_\_\_\_\_

PERIOD \_\_\_\_\_

## Unit 3, Lesson 15: Finding This Percent of That

1. a. To find 40% of 75, Priya calculates  $\frac{2}{5} \cdot 75$ . Does her calculation give the correct value for 40% of 75? Explain or show how you know.
- yes - 20% is  $\frac{1}{5}$  of a quantity  
so  $\frac{2}{5}$  is 40%*

- b. If  $x$  represents a number, does  $\frac{2}{5} \cdot x$  always represent 40% of that number? Explain your reasoning.

*yes  $\frac{2}{5} = \frac{40}{100}$*

*1/2*

2. Han spent 75 minutes practicing the piano over the weekend. For each question, explain or show your reasoning.

- a. Priya practiced the violin for 152% as much time as Han practiced the piano. How long did she practice?

*$\frac{152}{100} \cdot \frac{75}{1} = 114 \text{ min}$*

*or  $1\% = \frac{75}{100}$   
 $= .75 \times 152 = 114 \text{ min}$*

- b. Tyler practiced the clarinet for 64% as much time as Han practiced the piano. How long did he practice?

*$\frac{64}{100} \cdot \frac{75}{1} = 48 \text{ min}$*

*or  $1\% = .75$   
 $1\% = .75 \times 64 = 48 \text{ min}$*

*1/2*

3. Last Sunday 1,575 people visited the amusement park. 56% of the visitors were adults, 16% were teenagers, and 28% were children ages 12 and under. Find the number of adults, teenagers, and children that visited the park.

*$\frac{1575}{1} \times \frac{56}{100} = 882 \text{ adults}$     $\frac{1575}{1} \times \frac{16}{100} = 252 \text{ teens}$*

*1*

4. Order from greatest to least:

- ~~o 55% of 180~~
- ~~o 300% of 26~~

*$5\% = \frac{1}{20} = 9 \times 11 = 99$*

*$26 \times 3 = 78$*

*$\frac{1575}{1} \times \frac{28}{100} = 441 \text{ people under 12}$*

*$99 > 78$*

*1 1/6*