

Name _____

Directions: When working each of the following questions, be sure to show all work.

1) On a track team, there are 15 girls out of 45 teammates. What is the ratio of girls to teammates written as a fraction in simplest form?

a) $\frac{3}{4}$

b) $\frac{1}{3}$

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

d) $\frac{2}{5}$

2) Mrs. Simpson's class has 8 boys and 16 girls. What is the ratio of boys to girls in simplest form?

a) $\frac{4}{8}; 0.5$

b) $\frac{1}{4}; 0.25$

c) $\frac{1}{2}; 0.5$

d) $\frac{8}{16}; 0.5$

- 3) The table shows the numbers of different trees in a park. Express the ratio in simplest form that compares the number of spruce to the total number of trees.

a) $\frac{1}{4}$

b) $\frac{5}{20}$

c) $\frac{5}{15}$

d) $\frac{1}{3}$

| <i>Trees at a Park</i> | |
|------------------------|------------------------|
| <i>Tree</i> | <i>Number of Trees</i> |
| Oak | 3 |
| Spruce | 5 |
| Maple | 6 |
| Weeping Willow | 6 |

- 4) The table shows the numbers of different trees in a park. Express the ratio in simplest form that compares the number of oak to maple trees.

a) $\frac{2}{9}$

b) $\frac{3}{6}$

c) $\frac{1}{2}$

d) $\frac{1}{3}$

| <i>Trees at a Park</i> | |
|------------------------|------------------------|
| <i>Tree</i> | <i>Number of Trees</i> |
| Oak | 3 |
| Spruce | 5 |
| Maple | 6 |
| Weeping Willow | 6 |

- 5) The table shows the numbers of different trees in a park. Express the ratio in simplest form that compares the number of spruce to weeping willow trees.

a) $\frac{3}{6}$

b) $\frac{5}{6}$

c) $\frac{3}{5}$

d) $\frac{6}{5}$

| <i>Trees at a Park</i> | |
|------------------------|------------------------|
| <i>Tree</i> | <i>Number of Trees</i> |
| Oak | 3 |
| Spruce | 5 |
| Maple | 6 |
| Weeping Willow | 6 |

- 6) The table shows the numbers of different trees in a park. Express the ratio in simplest form that compares the number of maple to the total number of trees.

a) $\frac{3}{10}$

b) $\frac{2}{5}$

c) $\frac{6}{15}$

d) $\frac{6}{20}$

| <i>Trees at a Park</i> | |
|------------------------|------------------------|
| <i>Tree</i> | <i>Number of Trees</i> |
| Oak | 3 |
| Spruce | 5 |
| Maple | 6 |
| Weeping Willow | 6 |

7) Express $\frac{20 \text{ assignments}}{4 \text{ hours}}$ as a unit rate

a) $\frac{20 \text{ assignments}}{4 \text{ hours}}$

b) $\frac{5 \text{ assignments}}{4 \text{ hours}}$

c) $\frac{5 \text{ assignments}}{1 \text{ hour}}$

d) $\frac{4 \text{ assignments}}{1 \text{ hour}}$

8) Write the unit rate for the following rate. 16 texts in 4 hours

a) $\frac{8 \text{ texts}}{1 \text{ hour}}$

b) $\frac{4 \text{ texts}}{1 \text{ hour}}$

c) $\frac{16 \text{ texts}}{4 \text{ hours}}$

d) $\frac{32 \text{ texts}}{8 \text{ hours}}$

9) Find the missing value in the proportion $\frac{24}{8} = \frac{w}{2}$

a) $w = 6$

b) $w = 4$

c) $w = 3$

d) $w = \frac{1}{2}$

10) Find the missing value in the proportion $\frac{6}{m} = \frac{3}{7}$

- a) $m = 42$
- b) $m = 39$
- c) $m = 21$
- d) $m = 14$

11) Find the missing value in the proportion $\frac{9}{6} = \frac{6}{w}$

- a) $w = 6$
- b) $w = 4$
- c) $w = 3$
- d) $w = 2$

12) Write the unit rate for the following rate. 480 miles in 8 hours

- a) $\frac{60 \text{ mi}}{1 \text{ hour}}$
- b) $\frac{62 \text{ mi}}{1 \text{ hour}}$
- c) $\frac{64 \text{ mi}}{1 \text{ hour}}$
- d) $\frac{66 \text{ mi}}{1 \text{ hour}}$

13) Sam bought 6 notebooks for \$9. At this rate, how much will he spend on 11 notebooks? $\frac{\$}{\text{notebooks}} = \frac{\$}{\text{notebooks}}$

a) \$16.25

b) \$16.50

c) \$16.55

d) \$16.90

| | | | |
|-------------------------|--|---|----|
| <i>money spent (\$)</i> | | 9 | ? |
| <i># of notebooks</i> | | 6 | 11 |

14) Maria types a 5 page paper in 50 minutes. At this rate, how many pages will she type in 130 minutes? $\frac{\text{pages}}{\text{minutes}} = \frac{\text{pages}}{\text{minutes}}$

a) 11 *pages*

b) 12 *pages*

c) 13 *pages*

d) 15 *pages*

| | | | |
|----------------|--|----|----------|
| <i>pages</i> | | 5 | <i>w</i> |
| <i>minutes</i> | | 50 | 130 |

15) Six boxes of cards cost \$24. At this rate, how much would 4 boxes of notecards cost?

a) \$12

b) \$13

c) \$14

d) \$16