


Name: \_\_\_\_\_ Hr: \_\_\_\_\_

### Unit 4 Retake work

|      |    |      |      |      |     |       |
|------|----|------|------|------|-----|-------|
| a    | b  | c    | d    | e    | f   | m     |
| 0.75 | 28 | 30   | B    | 32.5 | A   | 14.88 |
| g    | h  | i    | j    | k    | l   |       |
| 4    | 2  | 0.22 | 1.75 | 0.25 | 7.8 |       |



**\*Remember to ask yourself**

- What am I finding?
- What information do I have?
- Do I use a formula, ratio or a proportion?
- Did I answer the question? (is there more than 1 step?)
- Does my answer make sense?

2) A fast-food restaurant has four sizes of cups as listed in the table below.

|          |             |               |              |              |
|----------|-------------|---------------|--------------|--------------|
| Size (x) | Small, 8 oz | Medium, 12 oz | Large, 16 oz | Super, 24 oz |
| Cost (y) | \$1.76      | \$2.64        | \$3.52       | \$5.28       |

What is the unit price (constant of proportionality)?

1) Which table shows a proportional relationship?

|    |              |                |    |              |                |
|----|--------------|----------------|----|--------------|----------------|
| 1) | <b>Hours</b> | <b>Dollars</b> | 3) | <b>Hours</b> | <b>Dollars</b> |
|    | 5            | 7              |    | 5            | 7              |
|    | 10           | 12             |    | 7            | 9              |
|    | 15           | 17             |    | 11           | 13             |
|    | 20           | 19             |    | 13           | 15             |

|    |              |                |    |              |                |
|----|--------------|----------------|----|--------------|----------------|
| 2) | <b>Hours</b> | <b>Dollars</b> | 4) | <b>Hours</b> | <b>Dollars</b> |
|    | 5            | 7              |    | 5            | 7              |
|    | 15           | 21             |    | 40           | 56             |
|    | 20           | 25             |    | 20           | 28             |
|    | 10           | 14             |    | 15           | 21             |

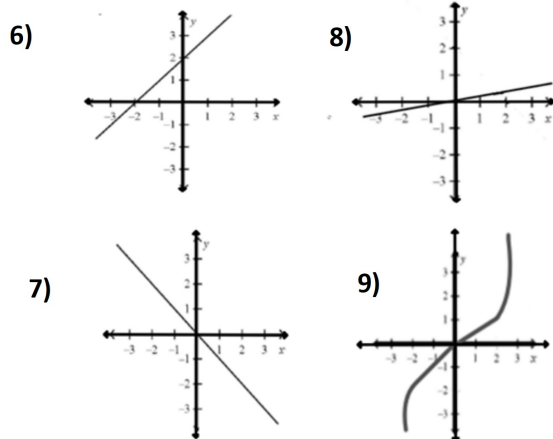
3) Which equation is represented by the situation on the graph?

- A)  $y = 2.5x$
- B)  $x = 2.5y$
- C)  $y = 0.4xd$
- D)  $y = 2.5 + x$

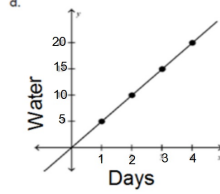
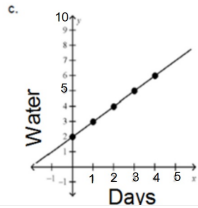
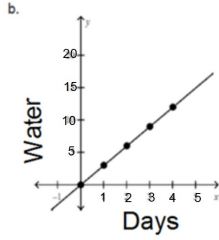
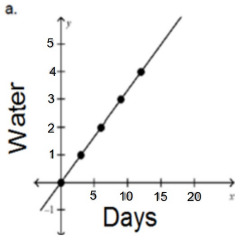


4) On a school field trip to the science museum, there are 4 chaperones for every 112 students. How many students does one chaperone supervise?

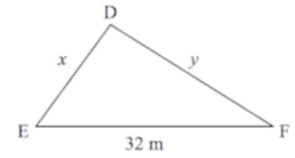
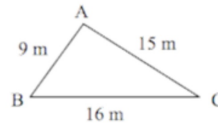
5) Which graphs represent a proportional relationship?



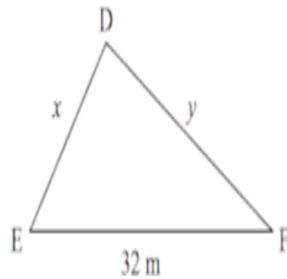
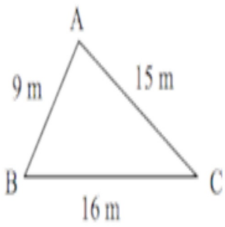
6) Mr. Lee drinks 3 glasses of water per day. Which graph represents this proportional relationship?



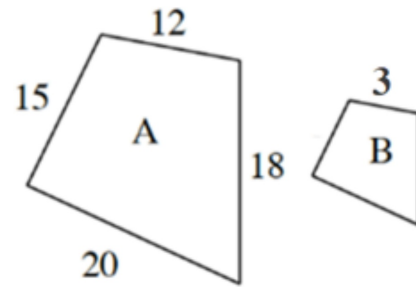
7) Triangle ABC is similar to triangle DEF. Figure ABC is the original, figure DEF is the copy, find the scale factor.



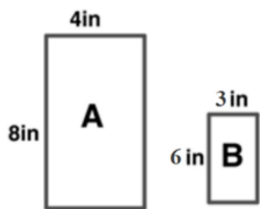
8) Triangle ABC is similar to triangle DEF. Solve for side y.



9) Figures A and B below are similar. Figure A is the original, figure B is the copy, find the scale factor.



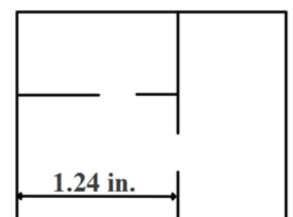
10) Rectangle A is similar to rectangle B. What is the scale factor from A to B?



11) According to the scale on a map, 1 inch on the map = 13 miles. How many miles are represented by 2.5 inches on the map?

12) Marcus is creating a scale drawing of his apartment. If the scale for the drawing is 1 inch = 8 feet, how long will a 14 foot room be on the drawing? A sketch might help.

13) In the scale drawing shown, how many feet are represented by the line indicating the length of a room?



Scale: 1 inch = 12 feet