Name _____

Practice
13-2

Using Unit Rates

Use unit rates to solve each proportion. Estimate to check for reasonableness.

1. $\frac{a \text{ ft}}{6 \text{ h}} = \frac{20 \text{ ft}}{4 \text{ h}}$ _____

2. $\frac{36 \text{ oz}}{6 \text{ lb}} = \frac{b \text{ oz}}{4 \text{ lb}}$ _____

3. $\frac{c \text{ players}}{10 \text{ teams}} = \frac{27 \text{ players}}{3 \text{ teams}}$ _____

4. $\frac{d \text{ c}}{20 \text{ tsp}} = \frac{60 \text{ c}}{12 \text{ tsp}}$ _____

5. $\frac{e \text{ m}}{12 \text{ cm}} = \frac{63 \text{ m}}{9 \text{ cm}}$ _____

6. $\frac{16 \text{ adults}}{2 \text{ children}} = \frac{f \text{ adults}}{5 \text{ children}}$ _____

7. $\frac{\$g}{30 \text{ lawns}} = \frac{\$200}{8 \text{ lawns}}$ _____

8. $\frac{12 \text{ mL}}{6 \text{ pt}} = \frac{h \text{ mL}}{40 \text{ pt}}$ _____

9. $\frac{33 \text{ meals}}{11 \text{ days}} = \frac{k \text{ meals}}{365 \text{ days}}$ _____

10. It takes DeShawn 30 min to paint 90 feet of fence. If he paints at the same rate, how many feet of fence can he paint in 45 min?

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11. Inez types 280 words in 7 minutes. If she types at the same rate, how many words will she type in 1 hour?

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12. Algebra Explain how you can tell that $\frac{20 \text{ pens}}{2 \text{ packages}} = \frac{30 \text{ pens}}{3 \text{ packages}}$ using mental math?

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13. Darryl was looking at the speeds of different airplanes. When he wrote a proportion to compare the speeds, he forgot to write one term. If the proportion is correct, which is the term he forgot?

$\frac{45 \text{ mi}}{\square} = \frac{135 \text{ mi}}{12 \text{ min}}$

A 4 mi **C** 36 mi

B 4 min **D** 36 min

14. Writing to Explain Jeanette estimates that she mails 2 letters for every 50 e-mails that she sends. She has mailed 9 letters this week. To find how many e-mails she has sent, Jeanette wrote the proportion $\frac{2 \text{ letters}}{50 \text{ e-mails}} = \frac{9 \text{ letters}}{e \text{ e-mails}}$. Tell how she can use unit rates to solve the proportion. Tell how many e-mails she received.

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