Lesson 5.7 Practice: Linear Models

School Launch · Algebra I · Unit 5: Linear Functions · Worksheet A

No calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. A candle is 32 cm tall and burns 1.9 cm per hour. Write a model for its height h after t hours and find the height after 4 hours. EASY

2. A candle is 36 cm tall and burns 2.4 cm per hour. Write a model for its height h after t hours and find the height after 4 hours. EASY

3. A candle is 40 cm tall and burns 2.5 cm per hour. Write a model for its height h after t hours and find the height after 4 hours. EASY

4. Esther has $360 saved and adds $12 each week. Write a linear model and find when the savings reach $432. MEDIUM

5. Esther has $230 saved and adds $15 each week. Write a linear model and find when the savings reach $440. MEDIUM

6. Thomas has $210 saved and adds $3 each week. Write a linear model and find when the savings reach $240. MEDIUM

7. Grace has $60 saved and adds $8 each week. Write a linear model and find when the savings reach $132. MEDIUM

8. Peter has $110 saved and adds $10 each week. Write a linear model and find when the savings reach $270. HARD

9. Grace has $180 saved and adds $11 each week. Write a linear model and find when the savings reach $257. HARD

10. Lydia has $150 saved and adds $18 each week. Write a linear model and find when the savings reach $258. HARD