

# Lesson 9 Skills Practice

## Direct Variation

Determine whether each linear function is a direct variation. If so, state the constant of proportionality.

1. 

Speed, $x$	25	30	35	40
Distance, $y$	100	120	140	160

**yes; 4**

2. 

Price, $x$	\$5	\$8	\$11	\$14
Tax, $y$	\$0.50	\$0.80	\$1.10	\$1.40

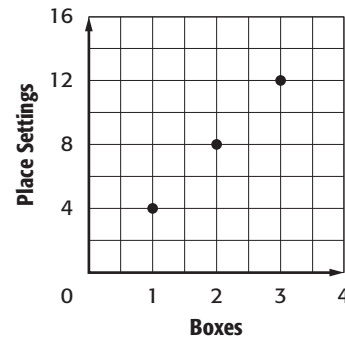
**yes;  $\frac{1}{10}$**

3. 

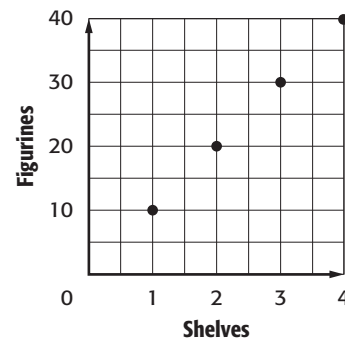
Seconds, $x$	15	30	45	60
Number of Sit-ups, $y$	5	10	15	20

**yes;  $\frac{1}{3}$**

4. **DISHES** The number of place settings of dishes varies directly with the number of boxes. How many place settings are in each box? **4**



5. **FIGURINES** Kentish is arranging figurines on shelves. The number of figurines varies directly with the number of shelves. What is the constant of proportionality? **10**



6. **CAT FOOD** Loretta paid \$6.70 for 5 cans of cat food and \$10.72 for 8 cans of cat food. How much did 1 can of cat food cost? **\$1.34**

7. **PILLOWS** You need 2 yards of fabric to cover 3 pillows and 6 yards to cover 9 pillows. How much fabric do you need to cover 15 pillows? **10 yards**

8. **READING** The number of pages read varies directly as the number of minutes. If you can read 20 pages in 45 minutes, how many pages can you read in 18 minutes? **8**