

**Direct Variation****Numeric Response**

1. The value of  $y$  varies directly with  $x$ , and  $y = 18.6$  when  $x = -27.9$ . Find  $y$  when  $x = -26.1$ .
2. The value of  $y$  varies directly with  $x$ , and  $y = 31.5$  when  $x = 28$ . Find  $x$  when  $y = 36.9$ .
3. The value of  $y$  varies directly with  $x$ , and  $y = 21.6$  when  $x = -21.6$ . Find  $y$  when  $x = 14.4$ .
4. The value of  $y$  varies directly with  $x$ , and  $y = -19$  when  $x = 15.2$ . Find  $x$  when  $y = 21.5$ .

**Short Answer**

5. What is the constant of variation for the following?

$x$	$-\frac{3}{2}$	$2$	$-2$
$y$	$\frac{21}{4}$	$-7$	$7$

6. What is the constant of variation for the following?

$x$	$-16.2$	$8.4$	$-11.4$
$y$	$-10.8$	$5.6$	$-7.6$

7. What is the constant of variation for the following?

$x$	$\frac{9}{4}$	$-\frac{3}{2}$	$-\frac{12}{5}$
$y$	$\frac{9}{4}$	$\frac{3}{2}$	$\frac{12}{5}$

8. What is the constant of variation for the following?

$x$	$13.8$	$9.3$	$17.4$
$y$	$-41.4$	$-27.9$	$-52.2$

9. The value of  $y$  varies directly with  $x$ , and  $y = 2$  when  $x = 3$ . Find  $y$  when  $x = -4$ .
10. The value of  $y$  varies directly with  $x$ , and  $y = -9$  when  $x = 7$ . Find  $x$  when  $y = \frac{27}{5}$ .
11. The value of  $y$  varies directly with  $x$ , and  $y = 5$  when  $x = -8$ . Find  $y$  when  $x = -\frac{32}{3}$ .
12. The value of  $y$  varies directly with  $x$ , and  $y = 9$  when  $x = 5$ . Find  $x$  when  $y = 9$ .
13. The value of  $y$  varies directly with  $x$ , and  $y = -9$  when  $x = -5$ . Find  $x$  when  $y = 12$ .
14. The value of  $y$  varies directly with  $x$ , and  $y = 6$  when  $x = -5$ . Find  $y$  when  $x = -4$ .

## Direct Variation Answer Section

### NUMERIC RESPONSE

1. ANS: 17.4

PTS: 1

2. ANS: 32.8

PTS: 1

3. ANS: -14.4

PTS: 1

4. ANS: -17.2

PTS: 1

### SHORT ANSWER

5. ANS:

$$\frac{7}{2}$$

PTS: 1

6. ANS:

$$\frac{2}{3}$$

PTS: 1

7. ANS:

$$-1$$

PTS: 1

8. ANS:

$$-3$$

PTS: 1

9. ANS:

$$\frac{8}{3}$$

PTS: 1



10. ANS:

$$\frac{21}{5}$$

PTS: 1

11. ANS:

$$\frac{20}{3}$$

PTS: 1

12. ANS:

$$5$$

PTS: 1

13. ANS:

$$\frac{20}{3}$$

PTS: 1

14. ANS:

$$\frac{24}{5}$$

PTS: 1

