

Tell whether the table represents direct variation. If so, write the direct variation equation.

19.

x	0.5	3	-2	1	-8
y	9	54	-36	18	-144

20.

x	-5	3	-2	10	20
y	-2	1.2	-0.8	4	8

21.

x	8	2	-4	-0.5	14
y	7	28	7	-112	4

22.

x	-0.2	-2	1	12	18
y	30	3	-6	-0.5	3

Given that y varies directly with x , use the specified values to write a direct variation equation that relates x and y .

23. $x = 24, y = 3$

24. $x = -16, y = -4$

25. $x = 28, y = -4$

26. $x = 5, y = -30$

27. $x = \frac{1}{6}, y = 1$

28. $x = 8, y = -3$

29. $x = 6, y = 102$

30. $x = -8, y = 64$

31. $x = 15, y = 9$

32. Hooke's Law The force F required to stretch a spring varies directly with the amount the spring is stretched s . Eight pounds is needed to stretch a spring 8 inches.

- Write a direct variation equation that relates F and s .
- How much force is required to stretch a spring 25 inches?

33. Basement Waterproofing One way to keep moisture out of your basement is to paint the walls with a waterproof paint. The number g (of gallons) of paint you need varies directly with the area A of the basement. One gallon of paint covers 100 square feet.

- Write a direct variation equation that relates g and A .
- How many gallons do you need to cover 530 square feet?
- How many square feet does 8.5 gallons of paint cover?

34. Downloading Files The table shows the amount of time t (in seconds) it takes to download a file of size s (in kilobytes).

- Explain why s varies directly with t .
- Write a direct variation equation that relates s and t .
- How long will it take to download an 800-kilobyte file?
Round your answer to the nearest second.

Time, t (sec)	File size, s (kb)
15	420
30	840
45	1260