

LESSON
3-4

Direct Variation

Practice and Problem Solving: A/B

Does the data show direct variation? Write *yes* or *no*. If the data shows direct variation, write an equation to describe the relationship.

1.

Time (s)	0.5	1	1.5	2
Distance (ft)	4	16	36	64

2.

Thickness (in.)	1	2	3	4
R-value	3.14	6.28	9.42	12.56

3.

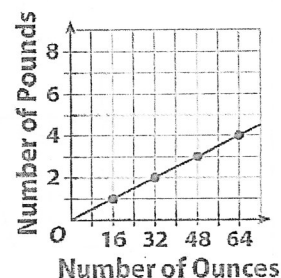
Hot Air (ft ³)	50	100	500	1000
Lift (lb)	1	2	10	20

4.

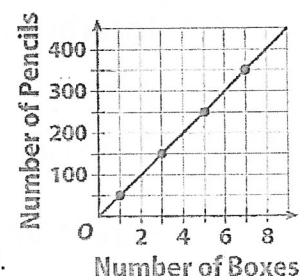
°Celsius	5	10	20	30
°Fahrenheit	41	50	68	86

Solve.

5. The number of pounds in a bag of flour varies directly with the number of ounces. Write a direct variation equation that describes the relationship. Use your equation to determine the number of pounds in 152 ounces.



6. The number of pencils for sale varies directly with the number of boxes. Write a direct variation equation that describes the relationship. Use your equation to determine the number of pencils in 14 boxes.



7. The fuel mileage of a hybrid vehicle is shown in the table below.

Fuel (gal)	6	9	27	40
Distance (mi)	192	288	864	1280

- a. Determine if the relationship is a direct variation. If so, write an equation that describes the relationship.

- b. How many miles can the car drive on 11 gallons of fuel? _____