

Algebra II

V-2

Direct Variation

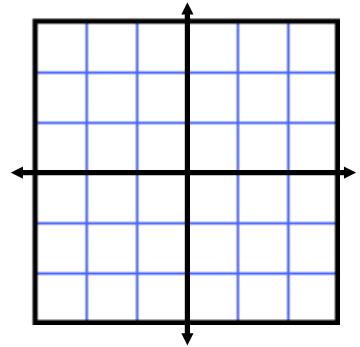
Translate each of the following sentences.

y varies directly as x .

y is directly proportional to x .

In a direct variation, as the input increases, the output

_____.



Solve.

1) If y varies directly as x , and $y = 6$ when $x = 15$, find y when $x = 25$.

Express each of these formulas as a variation. Which is the constant of variation (proportionality)?

1) $C = \pi d$

2) $E = m c^2$

3) $A = \pi r^2$.

Solve. (pg. 356)

- 3) A real estate agent made a commission of \$5400 on a house that sold at \$120,000. At this rate, what commission will the agent make on a house that sells for \$145,000.

- 9) The stretch in a loaded spring varies directly as the load it supports. A load of 15 kg stretches a certain spring 3.6 cm. What load would stretch the spring 6 cm. (Hooke's Law)

Assignment:

Pg. 354

2-12 all

Pg. 356

2-16 even (w.p.)