Direct proportion: y = kx *lesson handout*

Name _____

We do

y is directly proportional to x.
When $x = 4$, $y = 28$. Write a formula for y in terms of x.

$y \propto \square\,x \qquad y = k\square\,x$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$y = \square\,x$

You do

y is directly proportional to x.
When $x = 2$, $y = 18$. Write a formula for y in terms of x.

$y \propto \square \qquad y = k\square$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$y = \square\,x$

You do

m is directly proportional to t.
When $t = 5$, $m = 40$. Write a formula for m in terms of t.

$m \propto \square \qquad m = k\square$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$m = \square\,t$

We do

y is directly proportional to x.
When $x = 5$, $y = 15$. Find y when $x = 8$.

$y \propto \square\,x \qquad y = k\square\,x$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$y = \square\,x$

$y = \square \times \square = \square$

You do

y is directly proportional to x.
When $x = 7$, $y = 56$. Find y when $x = 6$.

$y \propto \square \qquad y = k\square$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$y = \square\,x$

$y = \square \times \square = \square$

You do

P is directly proportional to Q.
When $Q = 9$, $P = 36$. Find P when $Q = 11$.

$P \propto \square \qquad P = k\square$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$P = \square\,Q$

$P = \square \times \square = \square$

We do

y is directly proportional to x.
When $x = 5$, $y = 20$. Find x when $y = 32$.

$y \propto \square\,x \qquad y = k\square\,x$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$y = \square\,x$

$\square = \square \times x$

$x = \dfrac{\square}{\square} = \square$

You do

y is directly proportional to x.
When $x = 2$, $y = 12$. Find x when $y = 42$.

$y \propto \square \qquad y = k\square$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$y = \square\,x$

$\square = \square \times x$

$x = \dfrac{\square}{\square} = \square$

You do

A is directly proportional to r.
When $r = 4$, $A = 36$. Find r when $A = 72$.

$A \propto \square \qquad A = k\square$

$\square = k \times \square$

$k = \dfrac{\square}{\square} = \square$

$A = \square\,r$

$\square = \square \times r$

$r = \dfrac{\square}{\square} = \square$