

Topic 2 Review
(Review 2.1-2.3)

①

X	5	6	7	8
Y	30	36	42	48
R			$\frac{6}{1}$	

Proportional = all ratios
b/t x & y should be equal.

$\frac{30}{5} = \frac{6}{1}$ $\frac{36}{6} = \frac{6}{1}$ $\frac{48}{8} = \frac{6}{1}$

②

X	3	5	6	8
Y	9	25	36	64

NOT proportional.

→ All ratios b/t x & y
are different.

Ratio: $\frac{9}{3} = 3$ $\frac{25}{5} = 5$ $\frac{36}{6} = 6$ $\frac{64}{8} = 8$

③

Seed	Area	Ratios
1	20	$\frac{20}{1} = 20$
2	40	$\frac{40}{2} = 20$
3	60	$\frac{60}{3} = 20$
4	80	$\frac{80}{4} = 20$

Does show a
proportional
relationship.

④

Eggs	4	5	6
Milk	8	10	12
Ratio	$\frac{2}{1}$	$\frac{2}{1}$	$\frac{2}{1}$

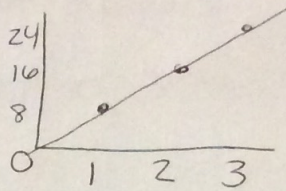
Proportional ✓
 $\frac{2}{1} = \frac{x}{5}$ $x = 10$

$\frac{2}{1} = \frac{12}{x}$ $\frac{2x}{2} = \frac{12}{2}$
 $x = 6$

⑤ $y = 8x$

x	y
0	0
1	8
2	16
3	24

$y = 8(0)$
 $y = 8(1)$
 $y = 8(2)$
 $y = 8(3)$

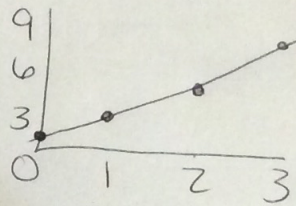


Ⓐ straight line & passes through origin.

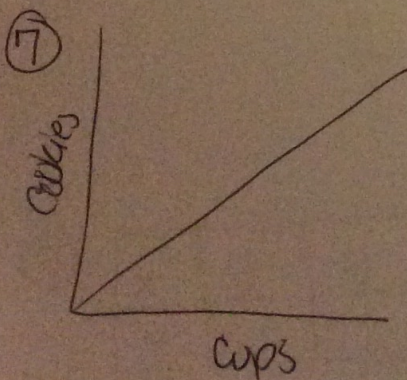
⑥ $y = 2x + 1$

x	y
0	1
1	3
2	5
3	7

$y = 2(0) + 1$
 $y = 2(1) + 1$
 $y = 2(2) + 1$
 $y = 2(3) + 1$



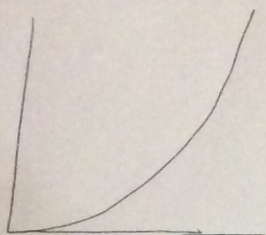
Ⓑ Does not pass through origin



$(0,0) =$ Ⓐ 0 cookies w/ 0 cups
 Ⓒ 0 cups for 0 cookies

$(1,18) =$ Ⓑ 18 cookies w/ 1 cup
 Ⓒ unit rate of 18 cookies per cup.

8



Proportional?

(D) Not a straight line.

9) 3 eggs = 141 g.

Const. of Prop \rightarrow
 $\frac{\text{weight}}{\text{egg}}$

$$\frac{141 \text{ g}}{3 \text{ eggs}} = 47$$

10) x & y are proportional

$$x = 3 \rightarrow y = 69$$

Const of Prop \rightarrow
 $\frac{y}{x}$

$$\frac{69}{3} = 23$$

(Digits might say $\frac{23}{1}$)

11

x	3	4	5	6
y	54	72	90	108

$$\frac{54}{3} = 18$$

$$\frac{72}{4} = 18$$

$$\frac{90}{5} = 18$$

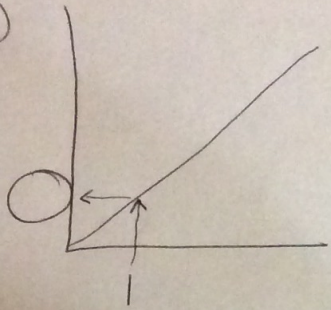
$$\frac{108}{6} = 18$$

Proportional? (Yes)

(A) proportional,
 Const of Prop =
 18

(Digits might say $\frac{18}{1}$)

12'

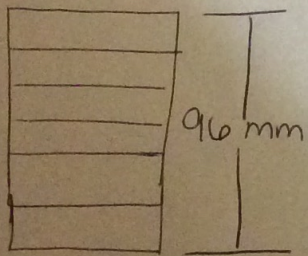


Const of prop.

→ Look where $x=1$ &
find what $y=$

$$\frac{y}{x} = \frac{18}{1} = \textcircled{18}$$

13



$$\frac{96 \text{ mm}}{6 \text{ DVD}} = \frac{x}{1 \text{ DVD}}$$

$$x = 16$$

Const of Prop = 16

If 1 DVD = 16 mm, Find 13 DVD

$$\frac{16 \text{ mm}}{1 \text{ DVD}} = \frac{x}{13 \text{ DVD}} \quad \boxed{x = 208}$$