## Direct Proportion

1. In each of these tables, y is directly proportional to x .

Fill in the gaps in each table.

| x | 4 | 8 | 12 |
| :---: | :---: | :---: | :---: |
| y | 1 | 2 | 3 |


| x | 2 | 6 | 7 |
| :---: | :---: | :---: | :---: |
| y | 10 | 30 | 35 |


| x | 3 | 5 | 10 | 16 |
| :---: | :---: | :---: | :---: | :---: |
| y | 4.5 | 7.5 | 15 | 24 |


| x | -2 | 0 | 10 | 7 | 20 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| y | -1 | 0 | 5 | 3.5 | 10 |


| x | 2 | 4 | 7 | 10 | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| y | 5 | 10 | 17.5 | 25 | 37.5 |

2. $x$ is directly proportional to $y$. When $x=5, y=15$. Find $y$ when $x=20$. $y=60$
3. $m$ is directly proportional to $n$. When $m=4, n=6$. Find $n$ when $m=10$. $\mathrm{n}=15$
4. $s$ is directly proportional to $t$. When $t=21, s=14$. Find $s$ when $t=201$. $\mathrm{s}=134$
5. c is directly proportional to d . When $\mathrm{c}=15, \mathrm{~d}=8$. Find c when $\mathrm{d}=10$. $\mathrm{c}=18.75$
6. $f$ is directly proportional to $g$. When $f=200, g=140$. Find $g$ when $f=$ 350.
$\mathrm{g}=245$
7. $y$ is directly proportional to the square of $x$. When $x=5, y=75$. Find $y$ when $\mathrm{x}=4$.
$y=48$
8. $k$ is directly proportional to the cube of $j$. When $j=2, k=40$. Find $j$ when $\mathrm{k}=320$.
$j=40$
9. $a$ is directly proportional to the square root of $b$. When $b=9, a=3 / 2$.

Find b when $\mathrm{a}=2$.

$$
b=16
$$

