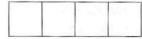
## **Exercise Set 1 (No Calculator)**

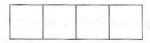
1

$$(1-(1-(1-2)))-(1-(1-(1-3)))=$$



2

When 14 is subtracted from 6 times a number, 40 is left. What is half the number?



3

Four consecutive even numbers have a sum of 76. What is the greatest of these numbers?



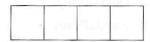
4

If 
$$\frac{5x}{2} + 3 = 7$$
, then  $10x + 12 =$ 



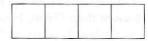
5

What number decreased by 7 equals the opposite of five times the number?



6

If 
$$5d + 12 = 24$$
, then  $5d - 12 =$ 



7

If 
$$\frac{2y^2}{5} = y^2$$
, then  $y + 5 =$ 



8

The product of x and y is 36. If both x and y are integers, then what is the least possible value of x - y?

- A) -37
- B) -36
- C) -35
- D) -9

9

If a factory can manufacture b computer screens in n days at a cost of c dollars per screen, then which of the following represents the total cost, in dollars, of the computer screens that can be manufactured, at that rate, in m days?

- A)  $\frac{bcm}{n}$
- B)  $\frac{bmr}{c}$
- C)  $\frac{mc}{bn}$
- D)  $\frac{bc}{mn}$

10

Which of the following is equivalent to  $5x(2x \times 3) - 5x^2$  for all real values of x?

- A)  $5x^2 + 15x$
- B)  $25x^2$
- C)  $5x^2 15x$
- D)  $10x^2 \times 15x 5x^2$

11

The symbol O represents one of the fundamental operators: +, -,  $\times$ , or  $\div$ . If  $(x \cup y) \times (y \cup x) = 1$  for all positive values of x and y, then O can represent

- A) -
- B) ×
- C) -
- D) :