# LEVEL 1
## ALGEBRA READINESS TEST
## TYPICAL QUESTIONS FROM COMPETENCY AREAS

**Integers**

Jim wrote a check for $318.00. If his balance was then $2126.00, what was his balance before he wrote this check?

    (A) $808     (B) $1808     (C) $2444     (D) $5306

What number multiplied by 6 gives –18 as a result?

    (A) –12     (B) –3     (C) 3     (D) –54

**Decimals**

$\dfrac{7.20}{2.4} =$     (A) 0.03     (B) 0.30     (C) 3.00     (D) 30.0

Which of the following best approximates $1.147 - 114.7$?

    (A) –100     (B) –10     (C) 10     (D) 100

**Fractions**

The ratio of "winning" tickets to tickets sold in the California Lottery is 2 to 5. If 3,500,000 tickets are sold, how many are "winners"?

    (A) 700,000     (B) 750,000     (C) 1,400,000     (D) 1,500,000

$\dfrac{1+\frac{1}{2}}{1-\frac{3}{4}} =$     (A) –6     (B) –2     (C) 2     (D) 6

**Exponents**

If in the formula $p = kt$, $k = 36$ and $p = 144$, then $t =$
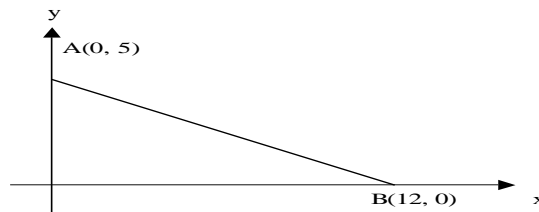
    (A) $\frac{1}{4}$     (B) 4     (C) 12     (D) 108

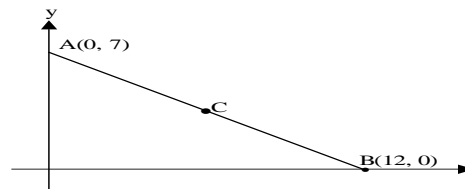$4(b+2) =$     (A) $4b+2$     (B) $b+6$     (C) $b+8$     (D) $4b+8$

**Geometry**

In the figure shown, what is the length of segment AB?

    (A) –5     (B) 5

    (C) 13     (D) 19



If C is the midpoint of segment AB in the figure shown, then the coordinates of C are

    (A) $\left(\frac{7}{2},\frac{7}{2}\right)$     (B) $\left(6,\frac{7}{2}\right)$

    (C) $\left(\frac{19}{2},\frac{7}{2}\right)$     (D) $\left(19,\frac{7}{2}\right)$



What is the diameter of the circle whose area is $36\pi$?

    (A) 12     (B) 18     (C) $6\pi$     (D) $18\pi$

**Answers:** 1. C    2. B    3. C    4. A    5. C    6. D    7. B    8. D    9. C    10. B    11. A