## LEVEL I

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) $\$ 1,808$
(C) $\$ 2,444$
(D) $\$ 5,306$

What number multiplied by 6 gives -18 as a result?
(A) -12
(B) -3
(C) 3
(D) -54

## Decimals

$\frac{7.20}{2.4}=$
(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) $1,500,000$
$\frac{1+\frac{1}{2}}{1-\frac{3}{4}}=$
(A) -6
(B) -2
(C) 2
(D) 6

## Exponents

If in the formula $p=k t, k=36$ and $p=144$, then $t=$
(A) $\frac{1}{4}$
(B) 4
(C) 12
(D) 108
$4(b+2)=$
(A) $4 \mathrm{~b}+2$
(B) $\mathrm{b}+6$
(C) $\mathrm{b}+8$
(D) $4 \mathrm{~b}+8$

## Geometry

In the figure shown, what is the length of segment $A B$ ?

(A) -5
(B) 5
(C) 13
(D) 19

If $C$ is the midpoint of segment $A B$ 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) $6 \%$
(D) $18 \pi$

Answer key: (1) C (2) B (3) C (4) A (5) C (6) D (7) B (8) D (9) C (10) B (11) A

