Name: $\qquad$
CC Geometry

## Perimeter and Area Practice

1) The area of a square is represented by $36 x^{2}$. What expression represents the length of each side of the square?
A) $6 x^{2}$
B) $9 x^{2}$
C) $6 x$
D) $9 x$
2) If the perimeter of a square is 52 cm , then each side must measure
A) 10 cm
B) 13 cm
C) 19 cm
D) 12 cm
3) If one side of a regular octagon is represented by $2 x-1$, the perimeter of the octagon can be represented by
A) $12 x-1$
B) $16 x-8$
C) $16 x-1$
D) $12 x-6$
4) A rectangular lot 80 feet by 150 feet is enclosed with a chain link fence. At $\$ 4.25$ per foot, how much does it cost to fence the lot?
A) $\$ 2,550$
B) $\$ 1,360$
C) $\$ 977.50$
D) $\$ 1,995$
5) If the side of an equilateral triangle is 4, then what is the perimeter of the triangle?
A) 12
B) 16
C) 4
D) 8
6) What is the perimeter of the rectangle pictured below?
15.7

A) 53.38
B) 38.2
C) 76.4
D) 106.76
7) What is the perimeter of a parallelogram with a length of 11 and a width of 5 ?
A) 64
B) 16
C) 55
D) 32
8) A piece of plywood must be cut in the shape of a trapezoid having the dimensions shown below.


How many square inches of plywood are needed to make eight pieces of the exact same shape?
A) 420 in. ${ }^{2}$
B) $41.25 \mathrm{in} .^{2}$
C) $330 \mathrm{in} .^{2}$
D) $660 \mathrm{in} .^{2}$
9) If the perimeter of a regular pentagon is 60 feet, find a side of the pentagon.
10) A rectangular roof measures 30 feet by 12 feet. Shingles for the roof cost $\$ 24.50$ per 100 square feet. Find the cost to purchase shingles for the roof.
11) What is the area of a square in which each side is 17 feet long?
12) What is the area of the parallelogram pictured below?

13) In the accompanying diagram, the area of $\triangle A B D$ is 15 and the area of $\triangle C B D$ is 12 . If segment $A C=10$, what is the length of segment $B D$ to the nearest tenth?

14) What is the area of the triangle pictured below?

15) The bases of a trapezoid have lengths 10 and 18. If the height of the trapezoid is 6 , what is the area of the trapezoid?
16) If tiles cost $\$ 1.50$ a square foot, what is the total cost of tiling an entire room that measures 30 feet by 23 feet?
17) In the accompanying diagram, parallelogram $A B C D$ has vertices $A(2,1), B(8,1), C(11,5)$, and $D(5,5)$. What is the area of parallelogram $A B C D$ ?

18) What is the area of a triangle whose side measures 6.2 meters and whose height to that base measures 4.7 meters?
19) Mr. Tomas is painting the floor of his 20-yard by 18 -yard basement. How many containers of paint will he need if one container covers 50 yards $^{2}$ ?
20) In the triangular garden $B C D, D B=30$ yards and $B C=21$ yards. In the adjoining right triangular plot $A B D, A D=24$ yards. If plot $A B D$ is added to garden $B C D$, what will be the total number of square yards in the area of the resulting garden $A C D$ ?


1) $C$ 2) $B$ 3) $B \quad$ 4) $D \quad$ 5) $A$
2) B 7) D 8) C
3) 12 ft
4) $\$ 88.20$
5) $289 \mathrm{ft}^{2}$
6) 18
7) 5.4
8) 30
9) 84
10) $\$ 1,035.00$
11) 24
12) $14.57 \mathrm{~m}^{2}$
13) 8
14) $468 \mathrm{yd}^{2}$
