MasterMath

6th Grade Quarter 3 Exam

Name _____

Date _____

$\pi = 3.14$; $C = \pi d$; $A = \pi r^2$

1. The radius of the rear tire of a truck is 22". If the tire is rotating at a constant speed of 60 revolutions per minute, how may feet will the truck travel in one minute?

690.8'

2. The diameter of a circle is 14cm. What is the perimeter?

43.96 cm

3. What is the perimeter of this semi-circle?

12.85'

   5'

4. A circle has a diameter of 16 mm. What is the circle's radius?
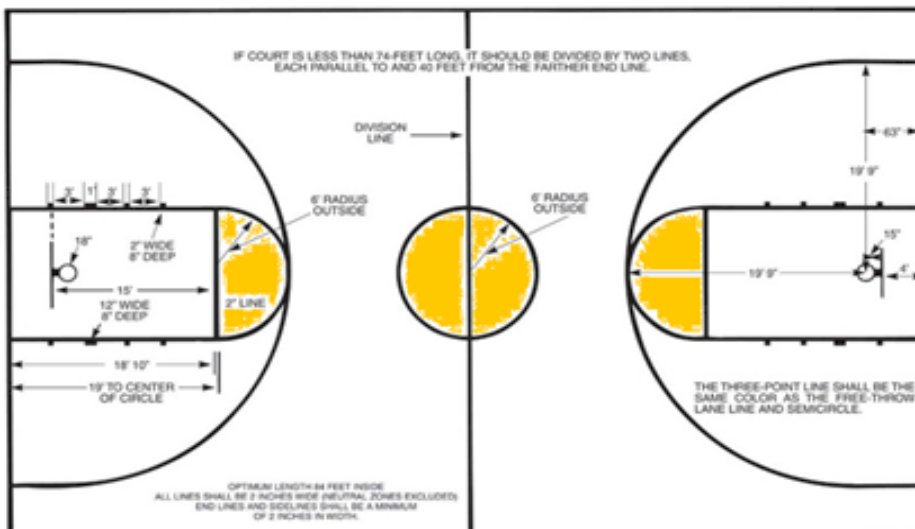
8mm

5. A circle has a perimeter of 15.7'. What is it's area?
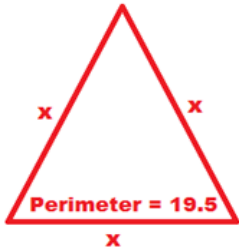
19.63 sq ft

6. Determine the area of the center circle plus the two semi-circles at the top of the foul line on this diagram of a basketball court.

226.08 sq ft

7. **Write an equation, and solve for x:** $\boxed{6.5}$

Perimeter = 19.5

8. **Half of your friends have brown hair. One-third of your friends have black hair. The rest have either yellow or red hair. What fraction of your friends have yellow or red hair?**
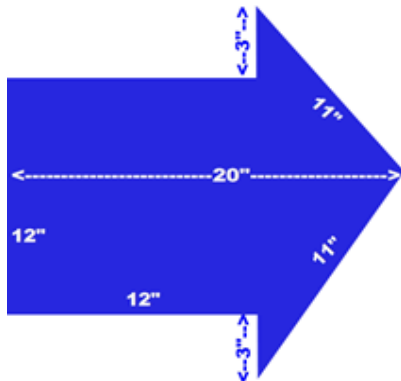
$\boxed{1/6}$

9. **You and your brother wanted to buy a trail bike that costs $428. You had riden your friend's trail bike at Pumpernickle State Park, and it was lots of fun. You decided to start a leaf-raking business, and hoped you could earn enough doing that to pay for the bike. You discovered that people would pay you $15 to rake their leaves. How many lawns will you have to rake in order to be able to buy the bike?**

$\boxed{29}$

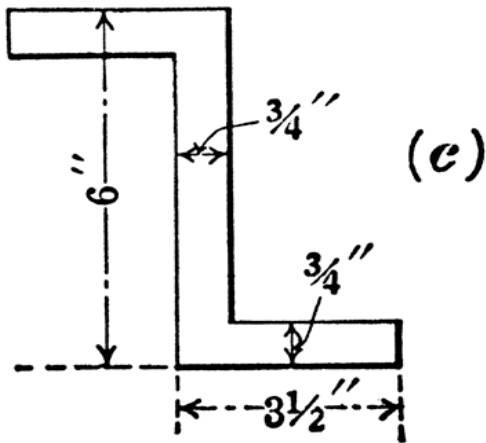10. **What is the perimeter of this arrow?** $\boxed{64"}$

11. **What is the area of the arrow?** $\boxed{216 \text{ sq in}}$

12. **What is the area of this figure?**

8.625 sq in

$\frac{3}{4}''$

(c)

6''

$\frac{3}{4}''$

$3\frac{1}{2}''$

13. **Solve for z: z - 12 = 22**

34

14. **Solve for x: x - 1/3 = 2/3**

1

15. **You can run a mile 21 seconds faster than your brother can. He runs a mile in 6 minutes and 18 seconds. Write an equation to determine how fast you can run a mile.**
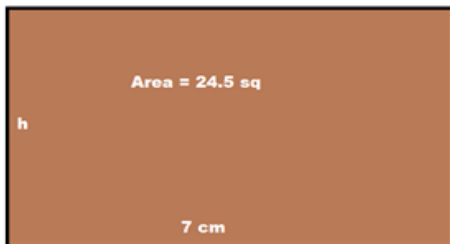
378 - 21 = 357 sec

16.

You've got 15 coins in your pocket, and all are either quarters or dimes. You have twice as many dimes as quarters. How many quarters do you have in your pocket?

5

17. **Solve for h:**

3.5

Area = 24.5 sq

h

7 cm

18. **Solve for x: 4x = 26**

6.5

19. **Two times a number is 16 more than 24. What is the number?**

20

20. **Solve for z: 5 - z = -11**

16

21. **Solve for b: 3b + 1/2 = 9 1/2**

3

22. **Solve for x:**

6

x   **Area = 54**

9

23.

The formula for the volume of a rectangular prism is V = lwh. A rectangular prism has a volume of 168 cu in, a height of 4" and a length of 7". What is its width?

6"

24. **What is the radius of this circle?**

15

C = 94.2 cm