01 Practice Set - Oscar Robertson

Instructions: Answer each question on loose leaf, quad-ruled (graph paper), headed properly and written in lead-graphite. Remember to fold paper along the center, work exercises in order top to bottom, left column then right column. Number multiple pages, and insert them in order of first to last. Show your work neatly, sequenced, appropriate and accurate. Respond in a sentence where appropriate.

1. Complete the statement: "The more math you **know....**"

N3CS23

- 2. From our Mathematics Playbook, state the 5 talents from being 'Good At Math.'
- 3. From The Huberman Lab Podcast, state the most essential element of improving focus and memory.
- From "Make Math More Successful and Not Scary," describe the statement "Gotta *take* the shot to *make* the shot!
- True or false, and explain why:
 For extra credit Mr. Ford will give assignments near the end of a grading period to bring your grade up.
- 6. You submit your Practice Set homework that contains 24 exercises. For eight (8) exercises you wrote a solution only. What would be your letter grade on this assignment, and why?
- 7. During your 30-min math routine, what essential tool are you using to 'Practice remembering'?
- 8. From "Make Math More Successful and Not Scary," finish this statement: "Make math like...."

Simplify the expression. Reduce fractions to lowest terms, keep improper where appropriate.

9.
$$\frac{1}{4} + \frac{1}{6} =$$

10.
$$\frac{1}{2} - \frac{3}{8} =$$

11.
$$\frac{2}{5} \times \frac{1}{8} =$$

12.
$$\frac{5}{8} \div \frac{5}{32} =$$

13.
$$7\frac{2}{3} + 8\frac{4}{5} =$$

14.
$$5\frac{1}{2} - 2\frac{5}{8} =$$

15.
$$9\frac{1}{3} \times 1\frac{7}{8} =$$

16.
$$7 \div 8\frac{3}{4} =$$

Simplify the expression.

17.
$$35 - 14 \div 2 + 64$$

18.
$$8 + 2(6 - 9) \div (-3) - 4$$

19.
$$44 + 17 - 5 \times 2$$

20.
$$6 \div 3(4-2) + 5$$

Evaluate the expressions where n = 10

21.
$$5n \div (14-9)$$

22.
$$\frac{25-n}{10-5}$$

23.
$$(n + 6 - 9)n$$

24.
$$50 \div (n + 15) + n$$

Translate the statement into the appropriate mathematics and solve. Write your solutions as mixed numbers, fractions reduced, where appropriate, include units, and state your result in a sentence.

- 25. A recipe calls for $3\frac{3}{4}$ cups of flour. How much flour is needed to make $\frac{1}{2}$ the recipe?
- 26. A $3\frac{1}{2}$ gallon gas can contains $\frac{9}{10}$ gallon. How much more gas can be poured in?
- 27. Spacely Sprockets makes $\frac{1}{3}$ of the world's widgets.

 Dundler Mifflin makes $\frac{2}{5}$ of the world's widgets. Starship Enterprises makes $\frac{1}{6}$ of the world's widgets. What fraction is made up by other companies?
- 28. A math textbook is $1\frac{3}{8}$ inches thick. How many of these books will fit on a 33-inch shelf?

Evaluate each expression with the given values of the variables. Include the appropriate units.

29.
$$r = \frac{d}{t}, d = 120m, t = 24s$$

30.
$$A = \frac{1}{2}bh, b = 84cm, h = 6cm$$

31.
$$A = \frac{1}{2}h(b_1 + b_2), h = 8cm, b_1 = 12cm, b_2 = 6cm$$

N3CS23

Instructions: Answer each question on loose leaf, quad-ruled (graph paper), headed properly and written in lead-graphite. Remember to fold paper along the center, work exercises in order top to bottom, left column then right column. Number multiple pages, and insert them in order of first to last. Show your work neatly, sequenced, appropriate and accurate. Respond in a sentence where appropriate.

sentence where appropriate.
32.
$$V(\frac{T-D}{W})$$
, $V = 600, T = 28,000, D = 24,000, W = 27,000$

Determine the value of the unknown that satisfies the equation, a.k.a., "Solve for x". Write solutions as reduced fractions where appropriate.

33.
$$x + 7 = 18$$

34.
$$x - 9 = 2$$

35.
$$x + 5 = -8$$

36.
$$x - 8 = -13$$

37.
$$3x = 11$$

38.
$$4x = 15$$

39.
$$12x = -80$$

$$40. -16x = 68$$

41.
$$4x + 13 = 29$$

42.
$$6x + 5 = -12$$

43.
$$5 - 7x = 21$$

44.
$$3x - \frac{2}{3} = 9$$

Write each situation as a linear equation in one unknown, and solve; Express your solution in a sentence.

- 45. The length of a rectangular field is 24 meters. This is 3 meters less than twice the width. Find the width.
- 46. Bryant travels two and one-half miles to get to school. This is 3 times the distance that Manuel travels. How far does Manuel travel?
- 47. The diameter of a small pizza is 16 centimeters, this is 2 centimeters more than two-fifths of the diameter of a large pizza. Find the diameter of the large pizza.
- 48. Rolex Smudgepot owns 17 ounces of gold. This is one ounce more than three fourths of the amount he owned last year. How much did he own last year?

