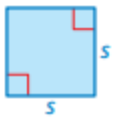
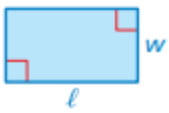
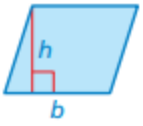
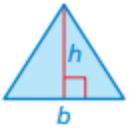
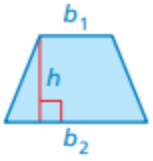
Wayne Township Public Schools
Summer Math Skills Refresher
for Incoming
7th Graders

Some tips and guidelines:

- ❑ Show all steps for all problems.
- ❑ Utilize your sixth grade enVision books, notes, and Virtual Nerd videos as needed.
- ❑ The section number is at the bottom right corner of each problem so you know where to find help.
- ❑ Simplify all fraction answers.
- ❑ Label units where necessary.
- ❑ Use the formulas below as needed.
- ❑ #1-38, 44-49: non-calculator active (only to check answers).
- ❑ #39-43, 50-60: calculator active.

Perimeter and Area

Square	Rectangle	Parallelogram	Triangle	Trapezoid
				
$P = 4s$ $A = s^2$	$P = 2\ell + 2w$ $A = \ell w$	$A = bh$	$A = \frac{1}{2}bh$	$A = \frac{1}{2}h(b_1 + b_2)$

Student Name: _____

1. $3.652 - 1.41$

2.242

(1.1)

2. $18.06 + 9.798$

27.858

(1.1)

3. $8.006 - 6.38$

1.626

(1.1)

4. 2.01×0.43

0.8643

(1.1)

5. 54.1×0.69

37.329

(1.1)

6. $59.6 \div 8$

7.45

(1.2)

7. Vicky makes jewelry. She uses 42 beads for each necklace that she makes, and she has 500 beads. How many full necklaces can she make?

11 necklaces

(38 beads left over)

(1.2)

8. $\frac{1}{5} \times \frac{5}{6}$

$\frac{1}{6}$

(1.3)

9. $3\frac{2}{3} \times 2\frac{3}{4}$

$10\frac{1}{12}$

(1.3)

10. $\frac{7}{8} \times 4\frac{1}{6}$

$3\frac{31}{48}$ *or* $\frac{175}{48}$

(1.3)

11. $\frac{8}{9} \div \frac{3}{4}$

$1\frac{5}{27}$

(1.5)

12. $3\frac{3}{4} \div 2$

$1\frac{7}{8}$ *or* $\frac{15}{8}$

(1.6)

13. $2\frac{2}{3} \div 3\frac{1}{4}$

$\frac{32}{39}$

(1.6)

14. On a recent trip, Jeremy and Frank drove 790 miles on $33\frac{1}{3}$ gallons of gas. How many miles per gallon did their car get on this trip?

$23\frac{7}{10}$ miles per gal

(1.6)

15. Luisa bought $2\frac{1}{2}$ pounds of apples, $3\frac{3}{8}$ pounds of oranges, and $1\frac{1}{4}$ pounds of pears. How many pounds of fruit did she buy in all?

$7\frac{1}{8}$ lbs

(grade 5)

16. Marie is creating a cross-stitch pattern with rectangles all the same size. What is the perimeter of each rectangle with sides of lengths $\frac{3}{4}$ inch and $\frac{2}{3}$ inch?

$2\frac{5}{6}$ inches

(grade 5)

17. Neil spends $1\frac{1}{4}$ hours washing the car and $2\frac{5}{8}$ hours weeding the yard. How many total hours does he spend on his chores?

$3\frac{7}{8}$ hours

(grade 5)

18. Using the information from the previous problem, how much longer does Neil spend weeding than washing the car?

$1\frac{3}{8}$ hours

(grade 5)

19. Find the Greatest Common Factor for 45 and 60.

15

(3.2)

20. Find the Greatest Common Factor for 14 and 28.

14

(3.2)

21. Find the Least Common Multiple for 3 and 4.

12

(3.2)

22. Find the Least Common Multiple for 4 and 9.

36

(3.2)

23. Evaluate: $5^2 - 9 \div 3$

22

(3.3)

24. Evaluate: $8 + 6 - 2 \times 2 - 3^2$

1

(3.3)

25. Evaluate: $4^2 \div [(3.2 \times 2) + 1.6]$

2

(3.3)

26. Evaluate the algebraic expression when $a = \frac{1}{3},\ b = 9,\ c = 5,\ d = 10$

$5d \div c + 2$

12

(3.5)

27. Evaluate the algebraic expression when $a = \frac{1}{3},\ b = 9,\ c = 5,\ d = 10$

$\frac{1}{2}d + c^2 - b$

21

(3.3)

28. Evaluate the algebraic expression when $a = \frac{1}{3},\ b = 9,\ c = 5,\ d = 10$

$12a + c - b$

0

(3.5)

29. Write an equivalent expression:

$6(8x+1)$

$48x+6$

(3.6)

30. Write an equivalent expression:

$35x+30$

$5(7x+6)$

(3.6)

31. Solve the equation: $25+y=42$

$y=17$

(4.3)

32. Solve the equation: $g-8=25$

$g=33$

(4.3)

33. Solve the equation: $30=m-18$

$m=48$

(4.3)

34. Solve the equation: $34=17b$

$b=2$

(4.4)

35. Solve the equation: $\frac{240}{d}=8$

$d=30$

(4.4)

36. Find the unit rate for 121 meals in 11 days.

11 meals/day

(5.5)

37. Find the unit rate for 50 minutes to make 20 calls.

2.5 min/call

(5.5)

38. Find the unit price of 6 goldfish for $7.38.

$1.23/goldfish

(5.6)

39. Find the unit rate and then determine which is the better value:
1 pound of apples for $2.15 or $2.15/lb
3 pounds of apples for $5.76 $1.92/lb

(5.6)

40. Find the unit rate and then determine which is the better value:
$74 for 4 theater tickets or $18.50/ticket
$91 for 5 theater tickets $18.20/ticket

(5.6)

41. A store sells 4 cans of beans for $9. What is the price of 7 cans of beans?

$15.75

(5.7)

42. A space shuttle orbits Earth at a rate of about 4,375 miles in 15 minutes. At this rate, how far does the space shuttle travel around Earth in 1 hour?

17,500 miles

(5.7)

43. Kelly saved $150. That is 50% of the money she earned this summer. How much did Kelly earn this summer?

$300

(6.1)

44. Write 0.24 as a simplified fraction.

$\frac{6}{25}$

(6.2)

45. Write 5% as a decimal.

0.05

(6.2)

46. Write $\frac{1}{4}$ as a percent. 25%

(6.2)

47. Write 18% as a simplified fraction.

$\frac{9}{50}$

(6.2)

48. What is 8% of 200?

16

(6.5)

49. What percent of 28 is 7?

25%

(6.5)

50. What percent of 88 is 77?

87.5%

(6.5)

51. Jeb earns $8 per hour. He gets a raise of 3.5%. How much is his raise?

$0.28

(6.5)

52. There are 25 acres of land on a farm. The owners planted corn on 68% of the land. On how many acres did they not plant corn?

8 acres

(6.5)

53. 150% of what number is 48?

32

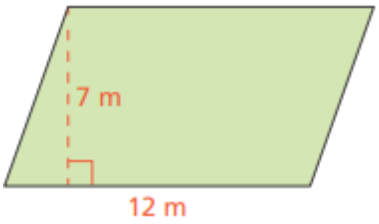
(6.6)

54. 300% of what number is 51?

17

(6.6)

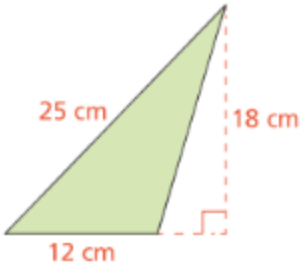
55. Find the area:



$84\ m^2$

(7.1)

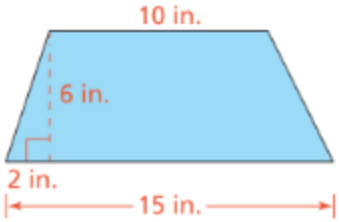
56. Find the area:



$108\ cm^2$

(7.2)

57. Find the area:



$75\ in^2$

(7.3)

National Parks in Western States	
Alaska	23
Arizona	22
California	26
Colorado	13
Hawaii	7
Idaho	6
Montana	8
Nevada	3
New Mexico	13
Oregon	6
Utah	13
Washington	13
Wyoming	7

58. Find the mean. $160 \div 13 \approx 12.3$
59. Find the median. 13
60. Find the mode(s). 13

(8.2)