PERIMETER SCHOOL
A Covenant Christian Community

Rising Seventh Grade Summer Math Assignment

Knowing that students can lose some of their math skills and concepts over the summer, we have a math portion of our *Perimeter School Summer Assignments,* which students will be expected to complete and turn in when they return to school in the fall.

1. Students should complete the attached printed math sheets. These will also be available on the school website along with other grade level information and other summer assignments.

2. Students should check their answers using **a different colored pen** and write the number of problems correct over the total number of problems at the top of the page. Answer keys are provided. (You may complete this process as many times as you like.)

3. Students should submit **all** completed work stapled to this sheet (with the **student's name** and a **parent's signature**) on **the first day of school - Monday, August 14**.

This will be counted as a homework grade.

Late submissions will **not be accepted. **

ASSIGNED MATH:

- One-Step Equations
- Multiplying Fractions
- Dividing Fractions
- Improper Fraction to Mixed Number Fraction
- Reducing Fractions
- Adding and Subtracting Integers
- Adding and Subtracting Fractions

OPTIONAL MATH ACTIVITIES:

Students' unfinished math workbooks will be sent home, which they can complete for optional work. This is not required work but would be helpful for next year.

Student's Name _____

Parent's Signature _____

Infinite Algebra 1 Name_____

One-Step Equations

Date_____ Period____

Solve each equation.

1) $26 = 8 + v$

2) $3 + p = 8$

3) $15 + b = 23$

4) $-15 + n = -9$

5) $m + 4 = -12$

6) $x - 7 = 13$

7) $m - 9 = -13$

8) $p - 6 = -5$

9) $v - 15 = -27$

10) $n + 16 = 9$

11) $-104 = 8x$

12) $14b = -56$

13) $-6 = \frac{b}{18}$

14) $10n = 40$

Multiplying Fractions Name:

Solve each problem.

1) $\frac{1}{5} \times \frac{2}{4} =$

2) $\frac{8}{3} \times \frac{1}{4} =$

3) $3\frac{1}{3} \times \frac{9}{2} =$

4) $\frac{5}{2} \times \frac{1}{4} =$

5) $\frac{21}{5} \times \frac{13}{5} =$

6) $3\frac{1}{3} \times 3\frac{1}{2} =$

7) $\frac{17}{5} \times \frac{14}{5} =$

8) $3\frac{2}{4} \times \frac{10}{4} =$

9) $\frac{13}{4} \times \frac{17}{4} =$

10) $2\frac{1}{4} \times \frac{1}{4} =$

11) $\frac{13}{4} \times \frac{1}{2} =$

12) $\frac{1}{2} \times \frac{1}{3} =$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Dividing Fractions Name:

Solve each problem.

1) $\frac{1}{5} \div \frac{2}{3} =$

2) $\frac{11}{3} \div 5\frac{1}{4} =$

3) $\frac{23}{3} \div \frac{25}{4} =$

4) $7\frac{1}{2} \div \frac{21}{4} =$

5) $8\frac{2}{3} \div \frac{27}{4} =$

6) $\frac{18}{4} \div \frac{17}{2} =$

7) $8\frac{2}{4} \div 3\frac{1}{2} =$

8) $\frac{29}{4} \div \frac{16}{3} =$

9) $\frac{3}{5} \div \frac{1}{2} =$

10) $4\frac{3}{5} \div \frac{9}{4} =$

11) $\frac{22}{3} \div 7\frac{1}{2} =$

12) $8\frac{1}{2} \div 7\frac{3}{4} =$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Improper Fraction to Mixed Number Fraction

Name:

Convert the improper fraction to a mixed number fraction.

$\frac{17}{5}$	$3\frac{2}{5}$	$3\frac{2}{5}$
First divide the numerator by the denominator. $17 \div 5 = 3$ r2	The 3 is your whole number. While the remainder become the numerator.	Your denominator stays the same. And now you have your mixed number.

Ex) $\frac{25}{3} = 8\frac{1}{3}$

1) $\frac{24}{10} =$

2) $\frac{58}{9} =$

3) $\frac{21}{2} =$

4) $\frac{77}{8} =$

5) $\frac{20}{8} =$

6) $\frac{58}{6} =$

7) $\frac{22}{6} =$

8) $\frac{3}{2} =$

9) $\frac{54}{8} =$

10) $\frac{13}{3} =$

11) $\frac{74}{7} =$

12) $\frac{14}{4} =$

13) $\frac{31}{8} =$

14) $\frac{31}{4} =$

15) $\frac{92}{9} =$

16) $\frac{16}{6} =$

17) $\frac{33}{9} =$

Answers

Ex. $8\frac{1}{3}$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Reducing Fractions Name:

Reduce each fraction as much as possible.

Ex) $\frac{18}{27} = \frac{2}{3}$

1) $\frac{9}{12} =$

2) $\frac{6}{16} =$

3) $\frac{20}{24} =$

4) $\frac{5}{10} =$

5) $\frac{7}{14} =$

6) $\frac{10}{40} =$

7) $\frac{12}{18} =$

8) $\frac{50}{80} =$

9) $\frac{6}{18} =$

10) $\frac{3}{12} =$

11) $\frac{6}{12} =$

12) $\frac{9}{18} =$

13) $\frac{6}{8} =$

14) $\frac{3}{9} =$

15) $\frac{30}{40} =$

16) $\frac{24}{64} =$

17) $\frac{8}{16} =$

18) $\frac{35}{42} =$

19) $\frac{35}{56} =$

20) $\frac{15}{18} =$

Answers

Ex. 2/3

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

 Name_____

Adding and Subtracting Integers

Date_____ Period____

Find each sum.

1) $(-12) + 7$

2) $(-10) + (-7)$

3) $(-6) + 12$

4) $8 + 7$

5) $3 + 4$

6) $(-45) + 9$

7) $(-1) + (-46)$

8) $(-30) + 10$

9) $(-34) + 50$

10) $38 + (-5)$

Find each difference.

11) $2 - (-2)$

12) $(-1) - 10$

13) $8 - 7$

14) $(-8) - (-6)$

15) $11 - 4$

16) $48 - (-31)$

17) $18 - 41$

18) $(-38) - 30$

19) $(-1) - (-3)$

20) $(-1) - (-40)$

Evaluate each expression.

21) $(-10) - 47$

22) $(-29) - 29$

23) $13 + (-29)$

24) $38 + 22$

25) $(-32) - 44$

26) $(-12) + (-11)$

27) $2 + 15 + 4$

28) $16 + (-13) + 5$

29) $2 - (-9) - 8$

30) $10 + 3 - (-8)$

Solve each problem.

1) $\frac{4}{5} - \frac{1}{2} =$

2) $\frac{5}{6} + \frac{3}{10} =$

3) $\frac{4}{8} - \frac{2}{10} =$

4) $\frac{3}{4} + \frac{7}{10} =$

5) $\frac{1}{4} - \frac{2}{10} =$

6) $\frac{3}{5} + \frac{7}{12} =$

7) $\frac{3}{8} - \frac{1}{10} =$

8) $\frac{5}{6} + \frac{3}{5} =$

9) $\frac{1}{2} - \frac{1}{6} =$

10) $\frac{3}{5} + \frac{1}{2} =$

11) $\frac{9}{10} - \frac{3}{4} =$

12) $\frac{4}{8} + \frac{1}{10} =$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Infinite Algebra 1 Name_____

One-Step Equations

Date_____ Period____

Solve each equation.

1) $26 = 8 + v$

{18}

2) $3 + p = 8$

{5}

3) $15 + b = 23$

{8}

4) $-15 + n = -9$

{6}

5) $m + 4 = -12$

{−16}

6) $x - 7 = 13$

{20}

7) $m - 9 = -13$

{−4}

8) $p - 6 = -5$

{1}

9) $v - 15 = -27$

{−12}

10) $n + 16 = 9$

{−7}

11) $-104 = 8x$

{−13}

12) $14b = -56$

{−4}

13) $-6 = \frac{b}{18}$

{−108}

14) $10n = 40$

{4}

Solve each problem.

1) $\frac{1}{5} \times \frac{2}{4} =$

$\frac{1}{5} \times \frac{2}{4} = \frac{2}{20}$

2) $\frac{8}{3} \times \frac{1}{4} =$

$\frac{8}{3} \times \frac{1}{4} = \frac{8}{12}$

3) $3\frac{1}{3} \times \frac{9}{2} =$

$\frac{10}{3} \times \frac{9}{2} = \frac{90}{6}$

4) $\frac{5}{2} \times \frac{1}{4} =$

$\frac{5}{2} \times \frac{1}{4} = \frac{5}{8}$

5) $\frac{21}{5} \times \frac{13}{5} =$

$\frac{21}{5} \times \frac{13}{5} = \frac{273}{25}$

6) $3\frac{1}{3} \times 3\frac{1}{2} =$

$\frac{10}{3} \times \frac{7}{2} = \frac{70}{6}$

7) $\frac{17}{5} \times \frac{14}{5} =$

$\frac{17}{5} \times \frac{14}{5} = \frac{238}{25}$

8) $3\frac{2}{4} \times \frac{10}{4} =$

$\frac{14}{4} \times \frac{10}{4} = \frac{140}{16}$

9) $\frac{13}{4} \times \frac{17}{4} =$

$\frac{13}{4} \times \frac{17}{4} = \frac{221}{16}$

10) $2\frac{1}{4} \times \frac{1}{4} =$

$\frac{9}{4} \times \frac{1}{4} = \frac{9}{16}$

11) $\frac{13}{4} \times \frac{1}{2} =$

$\frac{13}{4} \times \frac{1}{2} = \frac{13}{8}$

12) $\frac{1}{2} \times \frac{1}{3} =$

$\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

Answers

1. 2/20
2. 8/12
3. 90/6
4. 5/8
5. 273/25
6. 70/6
7. 238/25
8. 140/16
9. 221/16
10. 9/16
11. 13/8
12. 1/6

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Solve each problem.

1) $\frac{1}{5} \div \frac{2}{3} = \frac{3}{10}$

$\frac{1}{5} \times \frac{3}{2} = \frac{3}{10}$

2) $\frac{11}{3} \div 5\frac{1}{4} = \frac{44}{63}$

$\frac{11}{3} \times \frac{4}{21} = \frac{44}{63}$

3) $\frac{23}{3} \div \frac{25}{4} = \frac{92}{75}$

$\frac{23}{3} \times \frac{4}{25} = \frac{92}{75}$

4) $7\frac{1}{2} \div \frac{21}{4} = \frac{60}{42}$

$\frac{15}{2} \times \frac{4}{21} = \frac{60}{42}$

5) $8\frac{2}{3} \div \frac{27}{4} = \frac{104}{81}$

$\frac{26}{3} \times \frac{4}{27} = \frac{104}{81}$

6) $\frac{18}{4} \div \frac{17}{2} = \frac{36}{68}$

$\frac{18}{4} \times \frac{2}{17} = \frac{36}{68}$

7) $8\frac{2}{4} \div 3\frac{1}{2} = \frac{68}{28}$

$\frac{34}{4} \times \frac{2}{7} = \frac{68}{28}$

8) $\frac{29}{4} \div \frac{16}{3} = \frac{87}{64}$

$\frac{29}{4} \times \frac{3}{16} = \frac{87}{64}$

9) $\frac{3}{5} \div \frac{1}{2} = \frac{6}{5}$

$\frac{3}{5} \times \frac{2}{1} = \frac{6}{5}$

10) $4\frac{3}{5} \div \frac{9}{4} = \frac{92}{45}$

$\frac{23}{5} \times \frac{4}{9} = \frac{92}{45}$

11) $\frac{22}{3} \div 7\frac{1}{2} = \frac{44}{45}$

$\frac{22}{3} \times \frac{2}{15} = \frac{44}{45}$

12) $8\frac{1}{2} \div 7\frac{3}{4} = \frac{68}{62}$

$\frac{17}{2} \times \frac{4}{31} = \frac{68}{62}$

Answers

1. $\frac{3}{10}$
2. $\frac{44}{63}$
3. $1\frac{17}{75}$
4. $1\frac{18}{42} = 1\frac{3}{7}$
5. $1\frac{23}{81}$
6. $\frac{36}{68} = \frac{9}{17}$
7. $2\frac{12}{28} = 2\frac{3}{7}$
8. $1\frac{23}{64}$
9. $1\frac{1}{5}$
10. $2\frac{2}{45}$
11. $\frac{44}{45}$
12. $1\frac{6}{62} = 1\frac{3}{31}$

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Improper Fraction to Mixed Number Fraction Name: **Answer Key**

Convert the improper fraction to a mixed number fraction.

$\frac{17}{5}$	$3\frac{2}{5}$	$3\frac{2}{5}$
First divide the numerator by the denominator. $17 \div 5 = 3$ r2	The 3 is your whole number. While the remainder become the numerator.	Your denominator stays the same. And now you have your mixed number.

Ex) $\frac{25}{3} = 8\frac{1}{3}$

1) $\frac{24}{10} = 2\frac{4}{10}$

2) $\frac{58}{9} = 6\frac{4}{9}$

3) $\frac{21}{2} = 10\frac{1}{2}$

4) $\frac{77}{8} = 9\frac{5}{8}$

5) $\frac{20}{8} = 2\frac{4}{8}$

6) $\frac{58}{6} = 9\frac{4}{6}$

7) $\frac{22}{6} = 3\frac{4}{6}$

8) $\frac{3}{2} = 1\frac{1}{2}$

9) $\frac{54}{8} = 6\frac{6}{8}$

10) $\frac{13}{3} = 4\frac{1}{3}$

11) $\frac{74}{7} = 10\frac{4}{7}$

12) $\frac{14}{4} = 3\frac{2}{4}$

13) $\frac{31}{8} = 3\frac{7}{8}$

14) $\frac{31}{4} = 7\frac{3}{4}$

15) $\frac{92}{9} = 10\frac{2}{9}$

16) $\frac{16}{6} = 2\frac{4}{6}$

17) $\frac{33}{9} = 3\frac{6}{9}$

Answers

Ex. $8\frac{1}{3}$

1. $2\frac{4}{10}$
2. $6\frac{4}{9}$
3. $10\frac{1}{2}$
4. $9\frac{5}{8}$
5. $2\frac{4}{8}$
6. $9\frac{4}{6}$
7. $3\frac{4}{6}$
8. $1\frac{1}{2}$
9. $6\frac{6}{8}$
10. $4\frac{1}{3}$
11. $10\frac{4}{7}$
12. $3\frac{2}{4}$
13. $3\frac{7}{8}$
14. $7\frac{3}{4}$
15. $10\frac{2}{9}$
16. $2\frac{4}{6}$
17. $3\frac{6}{9}$
18. $8\frac{2}{8}$
19. $1\frac{8}{10}$
20. $10\frac{2}{3}$

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

Reducing Fractions Name: **Answer Key**

Reduce each fraction as much as possible.

Ex) $\frac{18}{27} = \frac{2}{3}$

1) $\frac{9}{12} = \frac{3}{4}$

2) $\frac{6}{16} = \frac{3}{8}$

3) $\frac{20}{24} = \frac{5}{6}$

4) $\frac{5}{10} = \frac{1}{2}$

5) $\frac{7}{14} = \frac{1}{2}$

6) $\frac{10}{40} = \frac{1}{4}$

7) $\frac{12}{18} = \frac{2}{3}$

8) $\frac{50}{80} = \frac{5}{8}$

9) $\frac{6}{18} = \frac{1}{3}$

10) $\frac{3}{12} = \frac{1}{4}$

11) $\frac{6}{12} = \frac{1}{2}$

12) $\frac{9}{18} = \frac{1}{2}$

13) $\frac{6}{8} = \frac{3}{4}$

14) $\frac{3}{9} = \frac{1}{3}$

15) $\frac{30}{40} = \frac{3}{4}$

16) $\frac{24}{64} = \frac{3}{8}$

17) $\frac{8}{16} = \frac{1}{2}$

18) $\frac{35}{42} = \frac{5}{6}$

19) $\frac{35}{56} = \frac{5}{8}$

20) $\frac{15}{18} = \frac{5}{6}$

Answers

Ex. 2/3
1. 3/4
2. 3/8
3. 5/6
4. 1/2
5. 1/2
6. 1/4
7. 2/3
8. 5/8
9. 1/3
10. 1/4
11. 1/2
12. 1/2
13. 3/4
14. 1/3
15. 3/4
16. 3/8
17. 1/2
18. 5/6
19. 5/8
20. 5/6

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0

 Name_____

Adding and Subtracting Integers

Date_____ Period____

Find each sum.

1) $(-12) + 7$

-5

2) $(-10) + (-7)$

-17

3) $(-6) + 12$

6

4) $8 + 7$

15

5) $3 + 4$

7

6) $(-45) + 9$

-36

7) $(-1) + (-46)$

-47

8) $(-30) + 10$

-20

9) $(-34) + 50$

16

10) $38 + (-5)$

33

Find each difference.

11) $2 - (-2)$

4

12) $(-1) - 10$

-11

13) $8 - 7$

1

14) $(-8) - (-6)$

-2

15) $11 - 4$

7

16) $48 - (-31)$

79

17) $18 - 41$

-23

18) $(-38) - 30$

-68

19) $(-1) - (-3)$

2

20) $(-1) - (-40)$

39

Evaluate each expression.

21) $(-10) - 47$

-57

22) $(-29) - 29$

-58

23) $13 + (-29)$

-16

24) $38 + 22$

60

25) $(-32) - 44$

-76

26) $(-12) + (-11)$

-23

27) $2 + 15 + 4$

21

28) $16 + (-13) + 5$

8

29) $2 - (-9) - 8$

3

30) $10 + 3 - (-8)$

21

Solve each problem.

1) $\frac{4}{5} - \frac{1}{2} =$

$\frac{8}{10} - \frac{5}{10} = \frac{3}{10}$

2) $\frac{5}{6} + \frac{3}{10} =$

$\frac{25}{30} + \frac{9}{30} = \frac{34}{30}$

3) $\frac{4}{8} - \frac{2}{10} =$

$\frac{20}{40} - \frac{8}{40} = \frac{12}{40}$

4) $\frac{3}{4} + \frac{7}{10} =$

$\frac{15}{20} + \frac{14}{20} = \frac{29}{20}$

5) $\frac{1}{4} - \frac{2}{10} =$

$\frac{5}{20} - \frac{4}{20} = \frac{1}{20}$

6) $\frac{3}{5} + \frac{7}{12} =$

$\frac{36}{60} + \frac{35}{60} = \frac{71}{60}$

7) $\frac{3}{8} - \frac{1}{10} =$

$\frac{15}{40} - \frac{4}{40} = \frac{11}{40}$

8) $\frac{5}{6} + \frac{3}{5} =$

$\frac{25}{30} + \frac{18}{30} = \frac{43}{30}$

9) $\frac{1}{2} - \frac{1}{6} =$

$\frac{3}{6} - \frac{1}{6} = \frac{2}{6}$

10) $\frac{3}{5} + \frac{1}{2} =$

$\frac{6}{10} + \frac{5}{10} = \frac{11}{10}$

11) $\frac{9}{10} - \frac{3}{4} =$

$\frac{18}{20} - \frac{15}{20} = \frac{3}{20}$

12) $\frac{4}{8} + \frac{1}{10} =$

$\frac{20}{40} + \frac{4}{40} = \frac{24}{40}$

Answers

1. $\frac{3}{10}$
2. $1\frac{4}{30}$
3. $\frac{12}{40}$
4. $1\frac{9}{20}$
5. $\frac{1}{20}$
6. $1\frac{11}{60}$
7. $\frac{11}{40}$
8. $1\frac{13}{30}$
9. $\frac{2}{6}$
10. $1\frac{1}{10}$
11. $\frac{3}{20}$
12. $\frac{24}{40}$

1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								