

Simplifying Fractions Worksheet

Name: _____ Date: _____

Write each fraction in simplest form. Divide the top and bottom by their greatest common factor.

1. $\frac{3}{9} = \frac{\boxed{}}{\boxed{}}$

2. $\frac{10}{12} = \frac{\boxed{}}{\boxed{}}$

3. $\frac{6}{15} = \frac{\boxed{}}{\boxed{}}$

4. $\frac{6}{12} = \frac{\boxed{}}{\boxed{}}$

5. $\frac{10}{15} = \frac{\boxed{}}{\boxed{}}$

6. $\frac{4}{6} = \frac{\boxed{}}{\boxed{}}$

7. $\frac{4}{28} = \frac{\boxed{}}{\boxed{}}$

8. $\frac{3}{24} = \frac{\boxed{}}{\boxed{}}$

9. $\frac{4}{10} = \frac{\boxed{}}{\boxed{}}$

10. $\frac{8}{20} = \frac{\boxed{}}{\boxed{}}$

11. $\frac{4}{8} = \frac{\boxed{}}{\boxed{}}$

12. $\frac{12}{16} = \frac{\boxed{}}{\boxed{}}$

13. $\frac{5}{10} = \frac{\boxed{}}{\boxed{}}$

14. $\frac{4}{12} = \frac{\boxed{}}{\boxed{}}$

15. $\frac{12}{20} = \frac{\boxed{}}{\boxed{}}$

16. $\frac{30}{36} = \frac{\boxed{}}{\boxed{}}$

Simplifying Fractions Worksheet

Answer Key

Write each fraction in simplest form. Divide the top and bottom by their greatest common factor.

1. $\frac{3}{9} = \frac{\boxed{1}}{\boxed{3}}$

2. $\frac{10}{12} = \frac{\boxed{5}}{\boxed{6}}$

3. $\frac{6}{15} = \frac{\boxed{2}}{\boxed{5}}$

4. $\frac{6}{12} = \frac{\boxed{1}}{\boxed{2}}$

5. $\frac{10}{15} = \frac{\boxed{2}}{\boxed{3}}$

6. $\frac{4}{6} = \frac{\boxed{2}}{\boxed{3}}$

7. $\frac{4}{28} = \frac{\boxed{1}}{\boxed{7}}$

8. $\frac{3}{24} = \frac{\boxed{1}}{\boxed{8}}$

9. $\frac{4}{10} = \frac{\boxed{2}}{\boxed{5}}$

10. $\frac{8}{20} = \frac{\boxed{2}}{\boxed{5}}$

11. $\frac{4}{8} = \frac{\boxed{1}}{\boxed{2}}$

12. $\frac{12}{16} = \frac{\boxed{3}}{\boxed{4}}$

13. $\frac{5}{10} = \frac{\boxed{1}}{\boxed{2}}$

14. $\frac{4}{12} = \frac{\boxed{1}}{\boxed{3}}$

15. $\frac{12}{20} = \frac{\boxed{3}}{\boxed{5}}$

16. $\frac{30}{36} = \frac{\boxed{5}}{\boxed{6}}$

Adding and Subtracting Unlike Fractions

Name: _____ Date: _____

Find a common denominator first. Write each answer in simplest form.

1. $\frac{9}{10} - \frac{1}{5} = \frac{\boxed{}}{\boxed{}}$

2. $\frac{5}{6} - \frac{1}{2} = \frac{\boxed{}}{\boxed{}}$

3. $\frac{4}{6} - \frac{1}{2} = \frac{\boxed{}}{\boxed{}}$

4. $\frac{2}{4} - \frac{3}{8} = \frac{\boxed{}}{\boxed{}}$

5. $\frac{3}{5} + \frac{9}{10} = \frac{\boxed{}}{\boxed{}}$

6. $\frac{1}{3} + \frac{2}{6} = \frac{\boxed{}}{\boxed{}}$

7. $\frac{1}{3} + \frac{1}{9} = \frac{\boxed{}}{\boxed{}}$

8. $\frac{3}{4} - \frac{1}{2} = \frac{\boxed{}}{\boxed{}}$

9. $\frac{1}{2} - \frac{2}{6} = \frac{\boxed{}}{\boxed{}}$

10. $\frac{2}{4} + \frac{2}{8} = \frac{\boxed{}}{\boxed{}}$

11. $\frac{2}{4} + \frac{4}{6} = \frac{\boxed{}}{\boxed{}}$

12. $\frac{3}{5} - \frac{1}{2} = \frac{\boxed{}}{\boxed{}}$

Adding and Subtracting Unlike Fractions

Answer Key

Find a common denominator first. Write each answer in simplest form.

1. $\frac{9}{10} - \frac{1}{5} = \frac{\boxed{7}}{\boxed{10}}$

2. $\frac{5}{6} - \frac{1}{2} = \frac{\boxed{1}}{\boxed{3}}$

3. $\frac{4}{6} - \frac{1}{2} = \frac{\boxed{1}}{\boxed{6}}$

4. $\frac{2}{4} - \frac{3}{8} = \frac{\boxed{1}}{\boxed{8}}$

5. $\frac{3}{5} + \frac{9}{10} = \frac{\boxed{3}}{\boxed{2}} = 1 \frac{1}{2}$

6. $\frac{1}{3} + \frac{2}{6} = \frac{\boxed{2}}{\boxed{3}}$

7. $\frac{1}{3} + \frac{1}{9} = \frac{\boxed{4}}{\boxed{9}}$

8. $\frac{3}{4} - \frac{1}{2} = \frac{\boxed{1}}{\boxed{4}}$

9. $\frac{1}{2} - \frac{2}{6} = \frac{\boxed{1}}{\boxed{6}}$

10. $\frac{2}{4} + \frac{2}{8} = \frac{\boxed{3}}{\boxed{4}}$

11. $\frac{2}{4} + \frac{4}{6} = \frac{\boxed{7}}{\boxed{6}} = 1 \frac{1}{6}$

12. $\frac{3}{5} - \frac{1}{2} = \frac{\boxed{1}}{\boxed{10}}$

Multiplying Fractions Worksheet

Name: _____ Date: _____

Multiply the numerators, multiply the denominators, then simplify.

1. $\frac{5}{6} \times \frac{1}{3} = \frac{\boxed{}}{\boxed{}}$

2. $\frac{3}{5} \times \frac{2}{4} = \frac{\boxed{}}{\boxed{}}$

3. $\frac{3}{5} \times \frac{1}{5} = \frac{\boxed{}}{\boxed{}}$

4. $\frac{2}{7} \times \frac{3}{6} = \frac{\boxed{}}{\boxed{}}$

5. $\frac{2}{7} \times \frac{2}{5} = \frac{\boxed{}}{\boxed{}}$

6. $\frac{4}{8} \times \frac{3}{6} = \frac{\boxed{}}{\boxed{}}$

7. $\frac{1}{6} \times \frac{1}{6} = \frac{\boxed{}}{\boxed{}}$

8. $\frac{1}{3} \times \frac{1}{6} = \frac{\boxed{}}{\boxed{}}$

9. $\frac{1}{3} \times \frac{1}{3} = \frac{\boxed{}}{\boxed{}}$

10. $\frac{3}{7} \times \frac{4}{8} = \frac{\boxed{}}{\boxed{}}$

11. $\frac{5}{6} \times \frac{4}{5} = \frac{\boxed{}}{\boxed{}}$

12. $\frac{2}{4} \times \frac{2}{5} = \frac{\boxed{}}{\boxed{}}$

Multiplying Fractions Worksheet

Answer Key

Multiply the numerators, multiply the denominators, then simplify.

1. $\frac{5}{6} \times \frac{1}{3} = \frac{\boxed{5}}{\boxed{18}}$

2. $\frac{3}{5} \times \frac{2}{4} = \frac{\boxed{3}}{\boxed{10}}$

3. $\frac{3}{5} \times \frac{1}{5} = \frac{\boxed{3}}{\boxed{25}}$

4. $\frac{2}{7} \times \frac{3}{6} = \frac{\boxed{1}}{\boxed{7}}$

5. $\frac{2}{7} \times \frac{2}{5} = \frac{\boxed{4}}{\boxed{35}}$

6. $\frac{4}{8} \times \frac{3}{6} = \frac{\boxed{1}}{\boxed{4}}$

7. $\frac{1}{6} \times \frac{1}{6} = \frac{\boxed{1}}{\boxed{36}}$

8. $\frac{1}{3} \times \frac{1}{6} = \frac{\boxed{1}}{\boxed{18}}$

9. $\frac{1}{3} \times \frac{1}{3} = \frac{\boxed{1}}{\boxed{9}}$

10. $\frac{3}{7} \times \frac{4}{8} = \frac{\boxed{3}}{\boxed{14}}$

11. $\frac{5}{6} \times \frac{4}{5} = \frac{\boxed{2}}{\boxed{3}}$

12. $\frac{2}{4} \times \frac{2}{5} = \frac{\boxed{1}}{\boxed{5}}$

Long Division by 2-Digit Numbers

Name: _____ Date: _____

Divide by a 2-digit number. Estimate first, then check.

1.

$$13 \overline{)791}$$

2.

$$13 \overline{)387}$$

3.

$$15 \overline{)474}$$

4.

$$15 \overline{)228}$$

5.

$$20 \overline{)738}$$

6.

$$15 \overline{)798}$$

7.

$$14 \overline{)798}$$

8.

$$18 \overline{)875}$$

9.

$$17 \overline{)598}$$

Long Division by 2-Digit Numbers

Answer Key

Divide by a 2-digit number. Estimate first, then check.

1.

$$\begin{array}{r} 60 \text{ R}11 \\ 13 \overline{)791} \end{array}$$

2.

$$\begin{array}{r} 29 \text{ R}10 \\ 13 \overline{)387} \end{array}$$

3.

$$\begin{array}{r} 31 \text{ R}9 \\ 15 \overline{)474} \end{array}$$

4.

$$\begin{array}{r} 15 \text{ R}3 \\ 15 \overline{)228} \end{array}$$

5.

$$\begin{array}{r} 36 \text{ R}18 \\ 20 \overline{)738} \end{array}$$

6.

$$\begin{array}{r} 53 \text{ R}3 \\ 15 \overline{)798} \end{array}$$

7.

$$\begin{array}{r} 57 \\ 14 \overline{)798} \end{array}$$

8.

$$\begin{array}{r} 48 \text{ R}11 \\ 18 \overline{)875} \end{array}$$

9.

$$\begin{array}{r} 35 \text{ R}3 \\ 17 \overline{)598} \end{array}$$

Order of Operations: No Parentheses

Name: _____ Date: _____

Multiply and divide first (left to right), then add and subtract.

1. $48 \div 8 + 7 =$ _____

2. $4 + 6 - 2 + 7 =$ _____

3. $80 - 9 \times 6 =$ _____

4. $3 \times 6 \div 3 =$ _____

5. $9 + 8 \times 7 =$ _____

6. $7 \times 2 \div 7 =$ _____

7. $70 - 6 \times 5 =$ _____

8. $6 + 5 - 2 + 4 =$ _____

9. $36 \div 6 + 8 =$ _____

10. $54 - 12 \div 6 =$ _____

11. $12 - 30 \div 6 =$ _____

12. $36 - 81 \div 9 =$ _____

13. $6 + 3 - 8 + 6 =$ _____

14. $3 \times 6 - 5 =$ _____

15. $7 + 9 - 4 + 6 =$ _____

16. $9 \div 3 + 4 =$ _____

17. $3 \times 8 \div 3 =$ _____

18. $3 \times 3 \div 3 =$ _____

19. $8 \times 5 + 2 \times 5 =$ _____

20. $90 - 8 \times 5 =$ _____

Order of Operations: No Parentheses

Answer Key

Multiply and divide first (left to right), then add and subtract.

1. $48 \div 8 + 7 = \underline{13}$

2. $4 + 6 - 2 + 7 = \underline{15}$

3. $80 - 9 \times 6 = \underline{26}$

4. $3 \times 6 \div 3 = \underline{6}$

5. $9 + 8 \times 7 = \underline{65}$

6. $7 \times 2 \div 7 = \underline{2}$

7. $70 - 6 \times 5 = \underline{40}$

8. $6 + 5 - 2 + 4 = \underline{13}$

9. $36 \div 6 + 8 = \underline{14}$

10. $54 - 12 \div 6 = \underline{52}$

11. $12 - 30 \div 6 = \underline{7}$

12. $36 - 81 \div 9 = \underline{27}$

13. $6 + 3 - 8 + 6 = \underline{7}$

14. $3 \times 6 - 5 = \underline{13}$

15. $7 + 9 - 4 + 6 = \underline{18}$

16. $9 \div 3 + 4 = \underline{7}$

17. $3 \times 8 \div 3 = \underline{8}$

18. $3 \times 3 \div 3 = \underline{3}$

19. $8 \times 5 + 2 \times 5 = \underline{50}$

20. $90 - 8 \times 5 = \underline{50}$

Order of Operations: No Parentheses (Set 2)

Name: _____ Date: _____

Multiply and divide first (left to right), then add and subtract.

1. $48 \div 8 + 3 =$ _____

2. $7 \times 5 \div 7 =$ _____

3. $4 \times 2 - 6 =$ _____

4. $5 \times 2 \div 5 =$ _____

5. $6 \times 9 \div 6 =$ _____

6. $12 \div 6 + 9 =$ _____

7. $8 + 2 \times 5 =$ _____

8. $5 + 4 \times 6 =$ _____

9. $5 + 8 - 7 + 3 =$ _____

10. $6 + 4 - 9 + 8 =$ _____

11. $8 + 4 \times 2 =$ _____

12. $25 - 30 \div 5 =$ _____

13. $8 \times 6 - 8 =$ _____

14. $2 \times 7 \div 2 =$ _____

15. $7 \times 3 \div 7 =$ _____

16. $5 \times 2 - 6 =$ _____

17. $63 \div 9 + 9 =$ _____

18. $8 \times 5 + 5 \times 3 =$ _____

19. $9 \times 6 \div 9 =$ _____

20. $80 - 9 \times 5 =$ _____

Order of Operations: No Parentheses (Set 2)

Answer Key

Multiply and divide first (left to right), then add and subtract.

1. $48 \div 8 + 3 = \underline{9}$

2. $7 \times 5 \div 7 = \underline{5}$

3. $4 \times 2 - 6 = \underline{2}$

4. $5 \times 2 \div 5 = \underline{2}$

5. $6 \times 9 \div 6 = \underline{9}$

6. $12 \div 6 + 9 = \underline{11}$

7. $8 + 2 \times 5 = \underline{18}$

8. $5 + 4 \times 6 = \underline{29}$

9. $5 + 8 - 7 + 3 = \underline{9}$

10. $6 + 4 - 9 + 8 = \underline{9}$

11. $8 + 4 \times 2 = \underline{16}$

12. $25 - 30 \div 5 = \underline{19}$

13. $8 \times 6 - 8 = \underline{40}$

14. $2 \times 7 \div 2 = \underline{7}$

15. $7 \times 3 \div 7 = \underline{3}$

16. $5 \times 2 - 6 = \underline{4}$

17. $63 \div 9 + 9 = \underline{16}$

18. $8 \times 5 + 5 \times 3 = \underline{55}$

19. $9 \times 6 \div 9 = \underline{6}$

20. $80 - 9 \times 5 = \underline{35}$

Order of Operations With Parentheses

Name: _____ Date: _____

Parentheses first, then multiply or divide, then add or subtract.

1. $(8 \div 4 + 2) \times 6 =$ _____

2. $(3 + 11) \div 2 + 5 =$ _____

3. $(48 \div 6) + 2 \times 9 =$ _____

4. $(2 \times 6 + 9 \times 6) \div 6 =$ _____

5. $45 - (4 + 6) =$ _____

6. $3 \times (4 + 3) - 9 =$ _____

7. $7 \times (3 + 4) =$ _____

8. $2 \times (7 + 9) =$ _____

9. $(7 + 7) \times 9 =$ _____

10. $6 \times (8 + 3) =$ _____

11. $40 - (4 + 5) =$ _____

12. $2 \times (9 + 5) =$ _____

13. $(10 \div 5) + 6 \times 4 =$ _____

14. $(16 \div 8) + 8 \times 2 =$ _____

15. $5 \times (7 + 6) =$ _____

16. $30 - (5 + 5) =$ _____

17. $3 \times (7 + 7) =$ _____

18. $(8 + 10) \div 2 + 7 =$ _____

19. $8 \times 4 - (5 + 9) =$ _____

20. $(15 \div 5) + 5 \times 4 =$ _____

Order of Operations With Parentheses

Answer Key

Parentheses first, then multiply or divide, then add or subtract.

1. $(8 \div 4 + 2) \times 6 = \underline{24}$

2. $(3 + 11) \div 2 + 5 = \underline{12}$

3. $(48 \div 6) + 2 \times 9 = \underline{26}$

4. $(2 \times 6 + 9 \times 6) \div 6 = \underline{11}$

5. $45 - (4 + 6) = \underline{35}$

6. $3 \times (4 + 3) - 9 = \underline{12}$

7. $7 \times (3 + 4) = \underline{49}$

8. $2 \times (7 + 9) = \underline{32}$

9. $(7 + 7) \times 9 = \underline{126}$

10. $6 \times (8 + 3) = \underline{66}$

11. $40 - (4 + 5) = \underline{31}$

12. $2 \times (9 + 5) = \underline{28}$

13. $(10 \div 5) + 6 \times 4 = \underline{26}$

14. $(16 \div 8) + 8 \times 2 = \underline{18}$

15. $5 \times (7 + 6) = \underline{65}$

16. $30 - (5 + 5) = \underline{20}$

17. $3 \times (7 + 7) = \underline{42}$

18. $(8 + 10) \div 2 + 7 = \underline{16}$

19. $8 \times 4 - (5 + 9) = \underline{18}$

20. $(15 \div 5) + 5 \times 4 = \underline{23}$

Order of Operations With Parentheses (Set 2)

Name: _____ Date: _____

Parentheses first, then multiply or divide, then add or subtract.

1. $(6 + 6) \times 6 =$ _____ 2. $4 \times 9 - (6 + 2) =$ _____

3. $(5 + 5) \times (2 - 1) =$ _____ 4. $45 - (6 + 4) =$ _____

5. $8 \times 8 - (6 + 4) =$ _____ 6. $8 \times 9 - (4 + 4) =$ _____

7. $(9 + 9) \times (7 - 1) =$ _____ 8. $6 \times 4 - (4 + 3) =$ _____

9. $(6 + 4) \times 3 =$ _____ 10. $(16 \div 4 + 8) \times 2 =$ _____

11. $5 \times 5 - (9 + 9) =$ _____ 12. $(12 \div 4 + 9) \times 8 =$ _____

13. $(8 \div 4 + 5) \times 5 =$ _____ 14. $(42 \div 7) + 9 \times 3 =$ _____

15. $7 \times (3 + 7) - 5 =$ _____ 16. $(4 + 9) \times 2 =$ _____

17. $(28 \div 4 + 7) \times 5 =$ _____ 18. $(4 + 5) \times 8 =$ _____

19. $(7 + 18) \div 5 + 2 =$ _____ 20. $4 \times 5 - (3 + 3) =$ _____

Order of Operations With Parentheses (Set 2)

Answer Key

Parentheses first, then multiply or divide, then add or subtract.

1. $(6 + 6) \times 6 = \underline{72}$

2. $4 \times 9 - (6 + 2) = \underline{28}$

3. $(5 + 5) \times (2 - 1) = \underline{10}$

4. $45 - (6 + 4) = \underline{35}$

5. $8 \times 8 - (6 + 4) = \underline{54}$

6. $8 \times 9 - (4 + 4) = \underline{64}$

7. $(9 + 9) \times (7 - 1) = \underline{108}$

8. $6 \times 4 - (4 + 3) = \underline{17}$

9. $(6 + 4) \times 3 = \underline{30}$

10. $(16 \div 4 + 8) \times 2 = \underline{24}$

11. $5 \times 5 - (9 + 9) = \underline{7}$

12. $(12 \div 4 + 9) \times 8 = \underline{96}$

13. $(8 \div 4 + 5) \times 5 = \underline{35}$

14. $(42 \div 7) + 9 \times 3 = \underline{33}$

15. $7 \times (3 + 7) - 5 = \underline{65}$

16. $(4 + 9) \times 2 = \underline{26}$

17. $(28 \div 4 + 7) \times 5 = \underline{70}$

18. $(4 + 5) \times 8 = \underline{72}$

19. $(7 + 18) \div 5 + 2 = \underline{7}$

20. $4 \times 5 - (3 + 3) = \underline{14}$

Order of Operations With Exponents

Name: _____ Date: _____

PEMDAS: parentheses, exponents, multiply/divide, add/subtract.

1. $8^2 + 3^2 =$ _____

2. $9^2 - 7 \times 4 =$ _____

3. $6^2 + 4^2 =$ _____

4. $(4 + 5)^2 =$ _____

5. $8^2 - 5 \times 5 =$ _____

6. $(4 + 6)^2 =$ _____

7. $(4 + 7)^2 =$ _____

8. $4^2 + 9^2 =$ _____

9. $6 \times 6^2 =$ _____

10. $2^3 \times 5 + 3 =$ _____

11. $(14 \div 2)^2 - 8 =$ _____

12. $(7 \times 6) - 4^2 =$ _____

13. $6^2 + 7^2 =$ _____

14. $(5 + 7)^2 =$ _____

15. $(7 \times 8) - 6^2 =$ _____

16. $(2 + 3)^2 =$ _____

17. $4^2 + 6^2 =$ _____

18. $6^2 + 8^2 =$ _____

19. $7 \times 5^2 =$ _____

20. $(3 + 3)^2 =$ _____

Order of Operations With Exponents

Answer Key

PEMDAS: parentheses, exponents, multiply/divide, add/subtract.

1. $8^2 + 3^2 = \underline{73}$

2. $9^2 - 7 \times 4 = \underline{53}$

3. $6^2 + 4^2 = \underline{52}$

4. $(4 + 5)^2 = \underline{81}$

5. $8^2 - 5 \times 5 = \underline{39}$

6. $(4 + 6)^2 = \underline{100}$

7. $(4 + 7)^2 = \underline{121}$

8. $4^2 + 9^2 = \underline{97}$

9. $6 \times 6^2 = \underline{216}$

10. $2^3 \times 5 + 3 = \underline{43}$

11. $(14 \div 2)^2 - 8 = \underline{41}$

12. $(7 \times 6) - 4^2 = \underline{26}$

13. $6^2 + 7^2 = \underline{85}$

14. $(5 + 7)^2 = \underline{144}$

15. $(7 \times 8) - 6^2 = \underline{20}$

16. $(2 + 3)^2 = \underline{25}$

17. $4^2 + 6^2 = \underline{52}$

18. $6^2 + 8^2 = \underline{100}$

19. $7 \times 5^2 = \underline{175}$

20. $(3 + 3)^2 = \underline{36}$

Order of Operations With Exponents (Set 2)

Name: _____ Date: _____

PEMDAS: parentheses, exponents, multiply/divide, add/subtract.

1. $(12 \div 2)^2 - 4 =$ _____

2. $2^3 \times 9 + 8 =$ _____

3. $2^2 + 4^2 =$ _____

4. $2^3 \times 3 + 7 =$ _____

5. $(5 \times 7) - 2^2 =$ _____

6. $8 \times 6^2 =$ _____

7. $(2 \times 3) - 2^2 =$ _____

8. $8^2 + 6^2 =$ _____

9. $2^3 \times 8 + 2 =$ _____

10. $6^2 + 8^2 =$ _____

11. $5^2 + 8^2 =$ _____

12. $(6 \div 2)^2 - 7 =$ _____

13. $3 \times 6^2 =$ _____

14. $7^2 - 7 \times 4 =$ _____

15. $(12 \div 2)^2 - 9 =$ _____

16. $7^2 + 2 =$ _____

17. $(3 + 9)^2 =$ _____

18. $2^3 \times 9 + 9 =$ _____

19. $8^2 + 7 =$ _____

20. $(14 \div 2)^2 - 7 =$ _____

Order of Operations With Exponents (Set 2)

Answer Key

PEMDAS: parentheses, exponents, multiply/divide, add/subtract.

1. $(12 \div 2)^2 - 4 = \underline{32}$

2. $2^3 \times 9 + 8 = \underline{80}$

3. $2^2 + 4^2 = \underline{20}$

4. $2^3 \times 3 + 7 = \underline{31}$

5. $(5 \times 7) - 2^2 = \underline{31}$

6. $8 \times 6^2 = \underline{288}$

7. $(2 \times 3) - 2^2 = \underline{2}$

8. $8^2 + 6^2 = \underline{100}$

9. $2^3 \times 8 + 2 = \underline{66}$

10. $6^2 + 8^2 = \underline{100}$

11. $5^2 + 8^2 = \underline{89}$

12. $(6 \div 2)^2 - 7 = \underline{2}$

13. $3 \times 6^2 = \underline{108}$

14. $7^2 - 7 \times 4 = \underline{21}$

15. $(12 \div 2)^2 - 9 = \underline{27}$

16. $7^2 + 2 = \underline{51}$

17. $(3 + 9)^2 = \underline{144}$

18. $2^3 \times 9 + 9 = \underline{81}$

19. $8^2 + 7 = \underline{71}$

20. $(14 \div 2)^2 - 7 = \underline{42}$