Student: _____ **Date:** _____	**Instructor:** Megan Rourke **Course:** MATH 1500 - Online	**Assignment:** Ch. 1&2 Homework

1. Multiply.

   59
   65
   ―

   59
   65

   [   ]

2. Write in words.

   771

   Choose the correct answer below.

   ○ **A.** seven hundred seventy-one
   ○ **B.** seven hundred and seventy and one
   ○ **C.** seven hundred and seventy-one
   ○ **D.** seven hundred seventy and one

3. Write in words.

   605,648

   Choose the correct answer below.

   ○ six thousand five, six hundred forty-eight
   ○ six hundred thousand and five, six hundred and forty-eight
   ○ six hundred five thousand, six hundred forty-eight
   ○ six hundred and five thousand, six hundred and forty-eight

4. Write as a number.

   thirty-six thousand, nine hundred ninety-six

   The number is [   ].

5. Round to the nearest ten.

    488

    What is 488 rounded to the nearest ten?

    [   ]

6. Round 2465 to the nearest thousand.

    The number 2465 rounded to the nearest thousand is [   ].

7. The billing department at a toy company sent out 80 invoices on Monday, 85 invoices on Tuesday, 116 invoices on Wednesday, 40 invoices on Thursday, and 64 invoices on Friday. What is the total number of invoices that were sent out in this five-day period?

    How many invoices were sent out?

    [   ]

8. Eight individually powered machines in a small production shop have motors using 430, 170, 786, 250, 668, 574, 180, and 210 watts each.

    (a) What is the total wattage used when the total shop is in operation?
    (b) What is the total wattage used when the three largest motors are running?
    (c) What is the total wattage used when the three smallest motors are running?

    (a) The total wattage used when the total shop is in operation is [   ] watts.

    (b) The total wattage used when the three largest motors are running is [   ] watts.

    (c) The total wattage used when the three smallest motors are running [   ] watts.

9. How many total linear feet of redwood are there in 66 2-in. by 4-in. boards each 30 ft long?

    The total linear feet of redwood equals [   ] ft.
    (Simplify your answer.)

10. Seven lug nuts are needed to mount a wheel. How many lug nuts are needed to mount four wheels on 70 vehicles?

    [   ] lug nuts are needed to mount four wheels on 70 vehicles.

11. A rural water district is required to set aside enough water for two hours of fire protection at a rate of 450 gallons per minute. How many gallons must it set aside?
    (Hint: Be careful of your time units.)

    The number of gallons to set aside is [   ].

12. Divide.

$54 \div 6$

Select the correct choice below and, if necessary, fill in the answer box(es) to complete your choice.

  ○ **A.** 54 is exactly divisible by 6. The quotient is _____ .

  ○ **B.** 54 is not exactly divisible by 6. The quotient is _____ with a remainder of _____ .

  ○ **C.** The quotient is not defined.

13. Divide.

$166 \div 6$

Select the correct choice below and, if necessary, fill in the answer box(es) to complete your choice.

  ○ **A.** 166 is exactly divisible by 6. The quotient is _____ .

  ○ **B.** 166 is not exactly divisible by 6. The quotient is _____ with a remainder of _____ .

  ○ **C.** The quotient is not defined.

14. Divide.

$44\overline{)432}$

Select the correct choice below and, if necessary, fill in the answer box(es) to complete your choice.

  ○ **A.** 432 is exactly divisible by 44. The quotient is _____ .

  ○ **B.** 432 is not exactly divisible by 44. The quotient is _____ with a remainder of _____ .

  ○ **C.** The quotient is not defined.

15. Perform the operations in the correct order.

$14 - (6 - 2)$

$14 - (6 - 2) = \boxed{}$ (Simplify your answer.)

16. Perform the operations in the correct order.

$$\frac{36}{9} + \frac{40}{5}$$

$\frac{36}{9} + \frac{40}{5} = \boxed{}$ (Simplify your answer.)

17. Perform the operations in the correct order.

$$\frac{4 + 11 \times 4}{17 - 3 \times 3}$$

$\frac{4 + 11 \times 4}{17 - 3 \times 3} = \boxed{}$ (Simplify your answer.)

18. A graphic company charges $80 per hour for the work of its most senior graphic artists, $30 per hour for the work of a production designer, and $19 per hour for the work of a trainee. A recent project required 33 hours of work from a senior artist, 15 hours from a production designer, and 40 hours from a trainee. Write out a mathematical statement for calculating the total labor cost, and then compute this cost.

Select the correct choice below and fill in the answer box to complete your choice.

(Simplify your answer.)

- **A.** $33 \times \$80 + 15 \times \$30 + 40 \times \$19 = \$$ _____

- **B.** $33 \times 15 \times 40 + \$80 \times \$30 \times \$19 = \$$ _____

- **C.** $(33 + 15 + 40) \times (\$80 + \$30 + \$19) = \$$ _____

- **D.** $\$80 \div 33 + \$30 \div 15 + \$19 \div 40 = \$$ _____

19. Compute using a calculator.

$$3563 - 13 \times (79 + 38)$$

$3563 - 13 \times (79 + 38) = \boxed{}$

20. Write as a mixed number.

$$\frac{14}{3}$$

$\frac{14}{3} = $ ☐

21. Write as a mixed number.

$$\frac{112}{6}$$

$\frac{112}{6} = $ ☐

22. Write $\frac{12}{20}$ in lowest terms.

$\frac{12}{20} = $ ☐ (Type an integer or a simplified fraction.)

23. Write in lowest terms.

$$5\frac{9}{12}$$

$5\frac{9}{12} = $ ☐

(Type a whole number, proper fraction, or mixed number.)

24. Write in lowest terms.

$$\frac{69}{18}$$

$\frac{69}{18} = $ ☐

(Type a whole number or a fraction.)

25.
Rewrite the fraction $\frac{1}{7}$ as an equivalent fraction with a denominator equal to 42.

$$\frac{1}{7} = \frac{?}{42}$$

$$\frac{1}{7} = \frac{\boxed{}}{42}$$

26.
Rewrite the mixed number $2\frac{1}{4}$ as an equivalent fraction with a denominator equal to 16.

$$2\frac{1}{4} = \frac{?}{16}$$

$$2\frac{1}{4} = \frac{\boxed{}}{16}$$

27.
Rewrite the mixed number $2\frac{1}{4}$ as an equivalent fraction with a denominator equal to 12.

$$2\frac{1}{4} = \frac{?}{12}$$

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

28. Which is larger?

$$1\frac{2}{3} \text{ or } 1\frac{2}{7}$$

Choose the correct statement.

○   The larger fraction is $1\frac{2}{3}$.

○   The larger fraction is $1\frac{2}{7}$.

29. Which is larger?

$$\frac{13}{5} \text{ or } \frac{5}{2}$$

○ The larger fraction is $\frac{13}{5}$.

○ The larger fraction is $\frac{5}{2}$.

30. Multiply.

$$\frac{5}{16} \times 4$$

$$\frac{5}{16} \times 4 = \boxed{}$$

(Type a whole number, proper fraction, or mixed number.)

31.

Multiply.

$$\frac{6}{11} \times \frac{5}{4}$$

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

(Simplify your answer. Type a whole number, proper fraction, or mixed number.)

32. Multiply.

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

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

(Type a whole number, proper fraction, or mixed number.)

33. Multiply.

$$\frac{6}{7} \times \frac{7}{6} \times 6$$

$\frac{6}{7} \times \frac{7}{6} \times 6 =$ [　　　　　]

(Type a whole number, proper fraction, or mixed number.)

34. Find $\frac{5}{9}$ of $\frac{9}{10}$.

$\frac{5}{9}$ of $\frac{9}{10}$ is [　　　　　].

(Type a whole number, proper fraction, or mixed number.)

35. Find the width of floor space covered by 42 boards with $7\frac{1}{4}$-in. exposed surface each.

The width of floor space is [　　　　　] in.

(Type a whole number, improper fraction, or mixed number.)

36. A family uses $17\frac{1}{2}$ pounds of paper in a week and recycles about $\frac{3}{4}$ of its waste. How many pounds of paper does the family recycle?

[　　　　　] lbs

37.

How far will a nut advance if it is given 38 turns on a $\frac{3}{8}$ in. 20-NF (National Fine

thread) bolt? (Hint: The designation 20-NF means that the nut advances $\frac{1}{20}$ in.

for each complete turn.)

$\rightarrow\!|\ \ |\!\leftarrow$Pitch $\frac{1}{20}^{\,\prime\prime}$
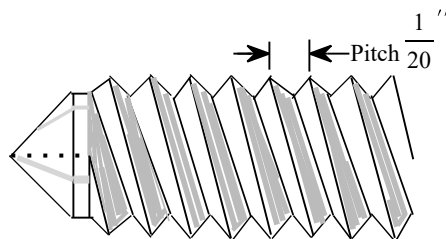
The nut will advance [　　　　　] in. if it is given 38 turns.

(Type a whole number, proper fraction, or mixed number.)

38. Divide and write the answer in lowest terms.

$$\frac{2}{14} \div \frac{7}{2}$$

$$\frac{2}{14} \div \frac{7}{2} = \boxed{}$$

(Type a whole number or a simplified fraction.)

39. Divide.

$$\frac{3}{16} \div \frac{6}{8}$$

$$\frac{3}{16} \div \frac{6}{8} = \boxed{}$$

(Type a whole number or a simplified fraction.)

40. Divide.

$$\frac{\frac{35}{7}}{4}$$

$$\frac{\frac{35}{7}}{4} = \boxed{} \text{ (Type a whole number or simplified fraction.)}$$

41. Subtract.

$$\frac{6}{29} - \frac{4}{29}$$

$$\frac{6}{29} - \frac{4}{29} = \boxed{}$$

(Type a whole number or a simplified fraction.)

42. Add.

$$\frac{1}{16} + \frac{1}{8}$$

$\frac{1}{16} + \frac{1}{8} = \boxed{}$

(Type a whole number or a simplified fraction.)

43. Subtract.

$$\frac{8}{18} - \frac{1}{9}$$

$\frac{8}{18} - \frac{1}{9} = \boxed{}$

(Type a whole number or a simplified fraction.)

44.
Add.

$$8\frac{1}{2} + \frac{1}{8}$$

$8\frac{1}{2} + \frac{1}{8} = \boxed{}$

(Type a whole number or a simplified fraction.)

45. Add.

$$4\frac{1}{3} + 3\frac{1}{7}$$

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

(Type a whole number, proper fraction, or mixed number.)

46.
Two splice plates are cut from a piece of sheet steel that has an overall length of $19\frac{1}{2}$ in. The plates are $10\frac{3}{8}$ in. and $6\frac{9}{16}$ in. long. How much material remains from the original piece if each saw cut removes $\frac{1}{16}$ in.?

$\boxed{}$ in. of material remains from the original piece.

(Type a whole number, proper fraction, or mixed number.)

47.

A joiner is set to remove $\frac{11}{25}$ in. from the width of an oak board. If the board was $8\frac{3}{5}$ in. wide, find its width after joining once.

The width of the oak board after joining once is [_____] in.

(Type a whole number, proper fraction, or mixed number.)

1. 3835

2. A. seven hundred seventy-one

3. six hundred five thousand, six hundred forty-eight

4. 36,996

5. 490

6. 2000

7. 385

8. 3268

   2028

   560

9. 1980

10. 1960

11. 54,000

12. A. 54 is exactly divisible by 6. The quotient is [**9**].

13. B. 166 is not exactly divisible by 6. The quotient is [**27**] with a remainder of [**4**].

14. B. 432 is not exactly divisible by 44. The quotient is [**9**] with a remainder of [**36**].

15. 10

16. 12

17. 6

18. A. $33 \times \$80 + 15 \times \$30 + 40 \times \$19 = \$$ [**3850**]

19. 2042

20. $4\dfrac{2}{3}$

21. $18\dfrac{4}{6}$

22. $\dfrac{3}{5}$

23. $5\dfrac{3}{4}$

24. $\dfrac{23}{6}$

25. 6

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26. 36

---

27. 27

---

28. The larger fraction is $1\frac{2}{3}$.

---

29. The larger fraction is $\frac{13}{5}$.

---

30. $1\frac{1}{4}$

---

31. $\frac{15}{22}$

---

32. 44

---

33. 6

---

34. $\frac{1}{2}$

---

35. $304\frac{1}{2}$

---

36. $\dfrac{105}{8}$

37. $1\dfrac{9}{10}$

38. $\dfrac{2}{49}$

39. $\dfrac{1}{4}$

40. 20

41. $\dfrac{2}{29}$

42. $\dfrac{3}{16}$

43. $\dfrac{1}{3}$

44. $8\dfrac{5}{8}$

45. $7\dfrac{10}{21}$

46. $2\dfrac{7}{16}$

47. $8\dfrac{4}{25}$