

Beginning-of-Course Diagnostic Test

Incoming 7th Grade

For Exercises 1–2, write the value of the underlined digit.

1. 842,976 2. 761.0325

3. Write seven and ninety-six thousandths as a decimal.

4. Write 9.204 in words.

5. Write 0.000073 in words.

For Exercises 6–7, use $<$, $>$, or $=$ to compare the decimals.

6. 0.008 ? 0.06

7. 0.000307 ? 0.003007

For Exercises 8–11, write the decimals in order from least to greatest.

8. 7.21 0.712 72.1 0.721

9. 0.01010 0.10101 0.01001 0.00101

10. Round 15,763 to the nearest thousand.

11. Round 96.853 to the nearest tenth.

For Exercises 12–13, round to the place of the underlined digit.

12. 123.9847

13. 147.48

For Exercises 14–17, find each sum or difference.

14.
$$\begin{array}{r} 76.87 \\ - 45.91 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 21.283 \\ + 9.72 \\ \hline \end{array}$$

16. $9 - 3.245$

17. $1.309 + 2.46 + 2.6$

For Exercises 18–24, multiply or divide.

18.
$$\begin{array}{r} 38.6 \\ \times 0.4 \\ \hline \end{array}$$

19. $0.0027 \cdot 0.04$

20. $16.8 \div 4$

21. $7,354 \div 0.01$

22. $5.697 \times 10,000$

23. $3.813 \div 4.1$

24. $0.002847 \div 0.73$

For Exercises 25–26, write each improper fraction as a mixed number.

25. $\frac{11}{3}$

26. $\frac{48}{11}$

For Exercises 27–28, write each mixed number as an improper fraction.

27. $6\frac{4}{7}$

28. $9\frac{1}{8}$

For Exercises 29–32, add or subtract. Write each answer in simplest form.

29. $\frac{9}{12} + \frac{5}{12}$

30. $\frac{7}{14} - \frac{5}{14}$

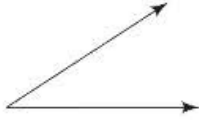
31. $6\frac{3}{8} + 8\frac{5}{8}$

32. $9\frac{8}{10} - 7\frac{3}{10}$

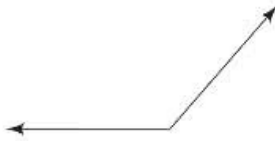
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For Exercises 33–34, measure each angle. Classify it as *acute*, *right*, *obtuse*, or *straight*.

33.



34.



For Exercises 35–36, draw an angle with the given measure.

35. 75°

36. 130°

37. Draw a bar graph for the data below.

Number of Movies Rented Per Month

Number of Movies	0	1	2	3	more than 3
Number of Rentals	2	3	7	5	8

38. Draw a double bar graph for the data below.

Favorite Vegetable in Ms. Green's Class

	Corn	Cabbage	Green Beans	Peas
Boys	8	5	6	1
Girls	5	7	6	3

39. Draw a line graph for the data below.

Forest Service Expenditures for Emergency Fire Suppression

Year	Cost Per Acre Burned
1	\$388.40
2	\$740.65
3	\$545.45
4	\$818.71
5	\$487.56
6	\$623.08
7	\$575.87
8	\$932.54
9	\$376.12
10	\$640.03
11	\$716.67
12	\$976.86

40. Draw a double line graph for the data below.

Average Temperatures

Month	Avg. High ($^\circ\text{F}$)	Avg. Low ($^\circ\text{F}$)
January	61	43
February	64	45
March	70	52
April	76	58
May	83	66
June	89	72
July	91	75
August	90	74
September	87	70
October	79	60
November	70	51
December	63	45