

Name _____ period _____ Date _____

Significant figures with Calculations

The following number sequences represent calculations done on a calculator with the answer given as the calculator would show it. Rewrite the answer with the appropriate significant figures. Don't forget addition and subtraction (least accurate) have different rules than multiplication and division (least number of significant figures).

Example

$$6.00 + 3.0 = 9$$

With the correct significant figures the answer should be 9.0

We will do these as a class; put units in answer also.

1) $23 \text{ cm} + 46 \text{ cm} = 69 \text{ cm}$ With the correct significant figures the answer should be _____

2) $23.0 \text{ cm} + 46.00 \text{ cm} = 69 \text{ cm}$ With the correct significant figures the answer should be _____

3) $253 \text{ cm} + 345.8 \text{ cm} = 598.8 \text{ cm}$ With the correct significant figures the answer should be _____

4) $56 \text{ cm} - 35.0 \text{ cm} = 21 \text{ cm}$ With the correct significant figures the answer should be _____

5) $56.00 \text{ cm} - 35.00 \text{ cm} = 21 \text{ cm}$ With the correct significant figures the answer should be _____

6) $16 \text{ cm} \times 12 \text{ cm} = 192 \text{ cm}^2$ With the correct significant figures the answer should be _____

7) $3.24 \text{ cm} \times 5.63 \text{ cm} = 18.2412 \text{ cm}^2$ With the correct significant figures the answer should be _____

8) $5.00 \text{ cm} \times 10.00 \text{ cm} = 50 \text{ cm}^2$ With the correct significant figures the answer should be _____

9) $654 \text{ cm}^2 \div 32 \text{ cm} = 20.4375 \text{ cm}$ With the correct significant figures the answer should be _____

10) $0.24 \text{ m} \times .063 \text{ m} = 1.512 \times 10^{-3} \text{ m}^2$ With the correct significant figures the answer should be _____

Now you do these on your own, do the calculations and give the answer with the correct sig figs, remember units.

11) $12.00 \text{ m} + .031 \text{ m} =$ With the correct significant figures the answer should be _____

12) $143.0 \text{ m} + .0063 \text{ m} =$ With the correct significant figures the answer should be _____

13) $29.49 \text{ cm} + 26.618 \text{ cm} =$ With the correct significant figures the answer should be _____

14) $62.47 \text{ m} - 39.6 \text{ m} =$ With the correct significant figures the answer should be _____

15) $298 \text{ cm} - 37.4 \text{ cm} =$ With the correct significant figures the answer should be _____

16) $53.245 \text{ m} - 23.15 \text{ m} =$ With the correct significant figures the answer should be _____

17) $3.15 \text{ m} \times 2 \text{ m} =$ With the correct significant figures the answer should be _____

18) $3.15 \text{ m} \times 2.0 \text{ m} =$ With the correct significant figures the answer should be _____

19) $5.00 \text{ cm} \times 6.2 \text{ cm} =$ With the correct significant figures the answer should be _____

20) $109 \text{ m}^2 \div 2.3 \text{ m} =$ With the correct significant figures the answer should be _____

21) $4.8 \times 10^{-3} \text{ m}^3 \div 6 \text{ m} =$ With the correct significant figures the answer should be _____