Rounding to significant figures

Exercise A - Round to 1 significant figure

1. 320	=	**5.** 76	=	**9.** 49.5	=
2. 475	=	**6.** 32654	=	**10.** 0.862	=
3. 5500	=	**7.** 13.7	=	**11.** 99	=
4. 2.8	=	**8.** 0.09458	=	**12.** 19500	=

Exercise B - Round to 2 significant figures

1. 825	=	**4.** 5841	=	**7.** 34821	=
2. 2.473	=	**5.** 261	=	**8.** 5.953	=
3. 8.95	=	**6.** 0.05236	=	**9.** 176.5	=

Exercise C - Round to 3 significant figures

1. 7654	=	**3.** 25.862	=	**5.** 125640	=
2. 128.35	=	**4.** 44.98	=	**6.** 0.054372	=

Exercise D – Complete the table

Number	Rounded to 1 sf	Rounded to 2 sf	Rounded to 3 sf
1. 2374			
2. 35253			
3. 5499			
4. 568.54			
5. 7.3782			
6. 953.75			
7. 64.95			
8. 8054			
9. 99.8721			
10. 0.3496			
11. 0.2007			
12. 0.006598			

Exercise E – Give an approximate answer.

You should round each number to 1 significant figure **before** any calculations are performed

1. 47 x 32	**5.** 632 x 2.94	**9.** 64 ÷ 0.23	**13.** 368 x 0.68
2. 280 x 15.8	**6.** $\frac{18.6}{0.39}$	**10.** $\frac{47.9 + 32.6}{1.75 \text{ x } 4.39}$	**14.** $\frac{12.7 \text{ x } 4.35}{0.18}$
3. 7.8 ÷ 0.352	**7.** 0.675 x 0.425	**11.** 0.61 ÷ 0.0175	**15.** 0.054 x 0.267
4. $\frac{5.36 + 2.83}{0.475}$	**8.** $\frac{24.7 - 6.35}{0.245}$	**12.** $\frac{43.5 \text{ x } 5.63}{34.8 - 9.67}$	**16.** $\frac{84 \text{ x } 6.33}{32.5}$

Remember to show your rounded numbers

Rounding to significant figures - answers

Exercise A - Round to 1 significant figure

1. 320	= 300	**5.** 76	= 80	**9.** 49.5	= 50
2. 475	= 500	**6.** 32654	= 30000	**10.** 0.862	= 0.9
3. 5500	= 6000	**7.** 13.7	= 10	**11.** 99	= 100
4. 2.8	= 3	**8.** 0.09458	= 0.09	**12.** 19500	= 20000

Exercise B - Round to 2 significant figures

1. 825	= 830	**4.** 5841	= 5800	**7.** 34821	= 35000
2. 2.473	= 2.5	**5.** 261	= 260	**8.** 5.953	= 6.0
3. 8.95	= 9.0	**6.** 0.05236	= 0.052	**9.** 176.5	= 180

Exercise C - Round to 3 significant figures

1. 7654	= 7650	**3.** 25.862	= 25.9	**5.** 125640	= 126000
2. 128.35	= 128	**4.** 44.98	= 45.0	**6.** 0.054372	= 0.0544

Exercise D – Complete the table

Number	Rounded to 1 sf	Rounded to 2 sf	Rounded to 3 sf
1. 2374	2000	2400	2370
2. 35253	40000	35000	35300
3. 5499	5000	5500	5500
4. 568.54	600	570	569
5. 7.3782	7	7.4	7.38
6. 953.75	1000	950	954
7. 64.95	60	65	65.0
8. 8054	8000	8100	8050
9. 99.8721	100	100	99.9
10. 0.3496	0.3	0.35	0.350
11. 0.2007	0.2	0.20	0.201
12. 0.006598	0.007	0.0066	0.00660

Exercise E – Give an approximate answer.

1. 47 x 32	**5.** 632 x 2.94	**9.** 64 ÷ 0.23	**13.** 368 x 0.68
50 x 30 = 1500	600 x 3 = 1800	60 ÷ 0.2 = 600 ÷ 2 = 300	400 x 0.7 = 280
2. 280 x 15.8	**6.** $\frac{18.6}{0.39}$	**10.** $\frac{47.9 + 32.6}{1.75 \times 4.39}$	**14.** $\frac{12.7 \times 4.35}{0.18}$
300 x 20 = 6000	$\frac{20}{0.4} = \frac{200}{4} = 50$	$\frac{50 + 30}{2 \times 4} = \frac{80}{8} = 10$	$\frac{10 \times 4}{0.2} = \frac{40}{0.2} = \frac{400}{2} = 200$
3. 7.8 ÷ 0.352	**7.** 0.675 x 0.425	**11.** 0.61 ÷ 0.0175	**15.** 0.054 x 0.267
8 ÷ 0.4 = 80 ÷ 4 = 20	0.7 x 0.4 = 0.28	0.6 ÷ 0.02 = 60 ÷ 2 = 30	0.05 x 0.3 = 0.015
4. $\frac{5.36 + 2.83}{0.475}$	**8.** $\frac{24.7 - 6.35}{0.245}$	**12.** $\frac{43.5 \times 5.63}{34.8 - 9.67}$	**16.** $\frac{84 \times 6.33}{32.5}$
$\frac{5+3}{0.5} = \frac{8}{0.5} = \frac{80}{5} = 16$ or $\frac{16}{1} = 16$	$\frac{20-6}{0.2} = \frac{14}{0.2} = \frac{140}{2} = 70$	$\frac{40 \times 6}{30-10} = \frac{240}{20} = 12$	$\frac{80 \times 6}{30} = \frac{480}{30} = 16$