Combining Calculations

Section A

Use the order of operations rule BIDMAS to find the value of each of these.

- **1.** $5 + 2 \times 6 =$
- **2.** $4 \times (12 5) =$
- **3.** $(6+3) \times (4^2 2 \times 3) =$
- **4.** $6 \times 2^2 (4 \div 2)^3 =$

Section B

Use your calculator to work these out. Write down all the figures your calculator shows.

- **1.** $5.2 + 4.02 \div 0.32 =$
- **2.** $3.54 \times (12.6 + 9.992) =$
- **3.** $123^2 \times 321 =$
- **4.** $\frac{2}{9} + \frac{4}{11} =$
- **5.** $2\frac{3}{8} \times 7\frac{5}{6} =$

Section C

Use the key time facts below to answer the questions. You may use a calculator.

1 minute = 60 seconds	1 hour = 60 minutes	1 day = 24 hours
1 week = 7 days	$1 month \approx 4 weeks$	1 year = 12 months

Careful: Most months are a little longer than 4 weeks. A year is just over 52 weeks.

- 1. How many seconds in an hour?
- 2. How many hours are in a week?
- 3. February normally has 28 days, January 31 days. How many more seconds are in January?
- 4. James earns £5 an hour. He works for 8 hours a day for 5 days a week. How much will he earn after three weeks?
- 5. Amanda has just turned 12. A normal year has 365 days, but a leap year has 366 days. Amanda has lived through three leap years during her 12 years. How many days old is she? How many hours? How many seconds?

Combining Calculations SOLUTIONS

Section A

Use the order of operations rule BIDMAS to find the value of each of these.

- **1.** $5 + 2 \times 6 = 17$
- **2.** $4 \times (12 5) = 28$
- **3.** $(6+3) \times (4^2 2 \times 3) = 90$
- **4.** $6 \times 2^2 (4 \div 2)^3 = \mathbf{16}$

Section B

Use your calculator to work these out. Write down all the figures your calculator shows.

1. $5.2 + 4.02 \div 0.32 = 17.7625$

2. $3.54 \times (12.6 + 9.992) = 79.97568$

3. $123^2 \times 321 = 4856409$

 $4.\frac{2}{9} + \frac{4}{11} = \frac{58}{99} = 0.\dot{5}\dot{8} = 0.5858\dots$

5. $2\frac{3}{8} \times 7\frac{5}{6} = 18\frac{29}{48} = \frac{893}{48} = 18.6041\dot{6} = 18.6041666 \dots$

Section C

Use the key time facts below to answer the questions. You may use a calculator.

1 minute = 60 seconds	1 hour = 60 minutes	1 day = 24 hours
1 week = 7 days	$1 month \approx 4 weeks$	1 year = 12 months

Careful: Most months are a little longer than 4 weeks. A year is just over 52 weeks.

- 1. How many seconds in an hour? 3600
- 2. How many hours are in a week? 168
- 3. February normally has 28 days, January 31 days. How many more seconds are in January? 259200
- 4. James earns £5 an hour. He works for 8 hours a day for 5 days a week. How much will he earn after three weeks? $\pounds 600$
- 5. Amanda has just turned 12. A normal year has 365 days, but a leap year has 366 days. Amanda has lived through three leap years during her 12 years.

How many days old is she?	How many hours?	How many seconds?
4383	105192	378,691,200