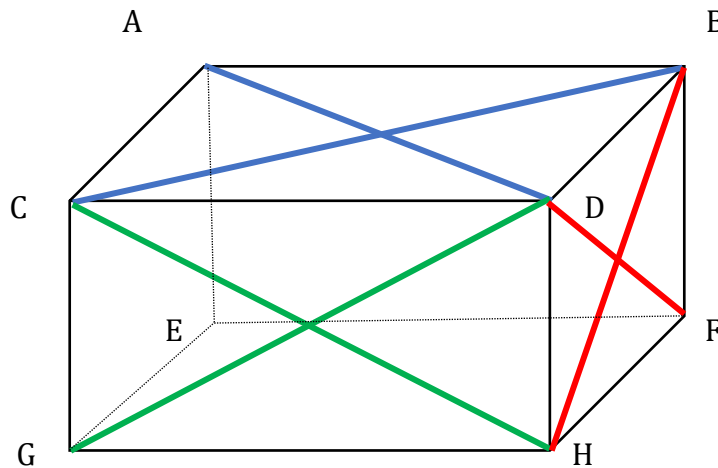


Pythagoras' Theorem – Lesson 12 – ANSWERS

In the cuboid below some of the **face** diagonals have been added. AD and CB (blue), CH and GD (green) and DF and BH (red).



- 1) GF and EH on the bottom
AF and EB on the back
GA and CE on the left-hand face.

- | | | | |
|------------|------------------|------------------|---------|
| 2) a) edge | b) face diagonal | c) face diagonal | d) edge |
| e) edge | f) face diagonal | g) edge | h) edge |

- | | | | |
|--------------|----------|-----------|-----------|
| 3) a) 10.8cm | b) 7.2cm | c) 11.7cm | d) 10.8cm |
|--------------|----------|-----------|-----------|

- 4) A cube has 12 space diagonals – 2 on each of its six faces

- 5) CH, BE and HC

- | | |
|---|--|
| 6) 8.8cm (rounded to one decimal place) | 7) 10.6cm (rounded to one decimal place) |
|---|--|

- | | |
|--|--|
| 8) 12.2cm (rounded to one decimal place) | 9) 11.2cm (rounded to one decimal place) |
|--|--|