## TRIGONOMETRY 3

1. Given that the property line is halfway between the two houses on the plan below, what is the distance between the two houses to the nearest tenth of a metre?

2. How far is the corner of house $B$ from the survey post to the nearest tenth of a metre?
3. A carpenter is instructed to cut a right-angled wooden wedge 25 cm long in the base with an angle of $12^{\circ}$. How long will the sloping surface of the wedge be to the nearest millimetre?
4. From a ladder, Wayne looks at a building 35 m away. He notes that the angle of elevation to the top of the building is $19^{\circ}$ and the angle of depression to the bottom of the building is $7^{\circ}$. How high is the building?
5. A slide in the Water Park is 9 m high. If the actual length of the slide is 14 m , what angle does the slide make with the horizontal?

## ANSWER KEY

1. 28.2 m
2. 24.1 m
3. 256 mm
4. 16.3 m
5. $40^{\circ}$

Source: Government of BC used with permission.

