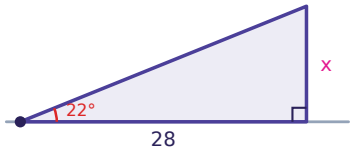
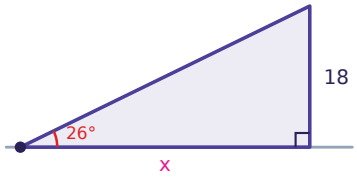
**Task card 1** Angles of Elevation & Depression

You stand 28 ft from the base of a flagpole. The angle of elevation to the top of the flagpole is 22°. How tall is the flagpole?



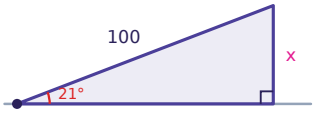

**Task card 2** Angles of Elevation & Depression

The top of a 18 m tower is seen from a point on the ground at an angle of elevation of 26°. How far is the point from the base of the tower?



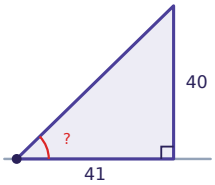

**Task card 3** Angles of Elevation & Depression

A kite string is 100 ft long and makes an angle of elevation of 21° with the ground. How high is the kite?



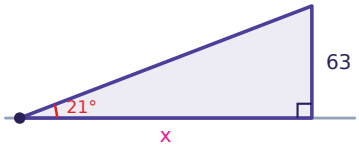

**Task card 4** Angles of Elevation & Depression

A ramp rises 40 ft over a horizontal distance of 41 ft. Find its angle of elevation.



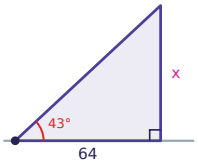

**Task card 5** Angles of Elevation & Depression

The top of a 63 m tower is seen from a point on the ground at an angle of elevation of 21°. How far is the point from the base of the tower?



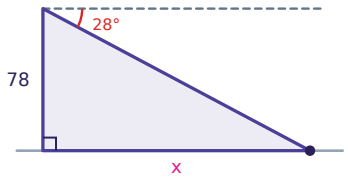

**Task card 6** Angles of Elevation & Depression

You stand 64 ft from the base of a cliff. The angle of elevation to the top of the cliff is 43°. How tall is the cliff?



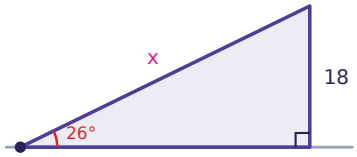
**Task card 7** Angles of Elevation & Depression

From the top of a 78 ft lighthouse, the angle of depression to a boat is 28°. How far is the boat from the base of the lighthouse?



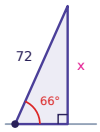

**Task card 8** Angles of Elevation & Depression

A ladder leans against a wall and makes a 26° angle with the ground. The top of the ladder is 18 ft above the ground. How long is the ladder?



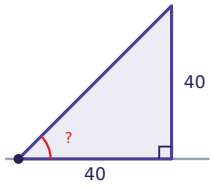

**Task card 9** Angles of Elevation & Depression

A kite string is 72 ft long and makes an angle of elevation of 66° with the ground. How high is the kite?



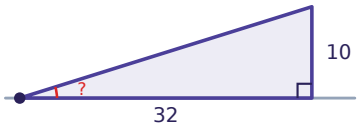

**Task card 10** Angles of Elevation & Depression

A ramp rises 40 ft over a horizontal distance of 40 ft. Find its angle of elevation.



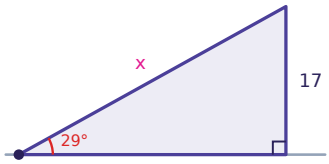

**Task card 11** Angles of Elevation & Depression

A ramp rises 10 ft over a horizontal distance of 32 ft. Find its angle of elevation.



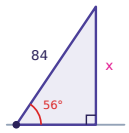

**Task card 12** Angles of Elevation & Depression

A ladder leans against a wall and makes a 29° angle with the ground. The top of the ladder is 17 ft above the ground. How long is the ladder?



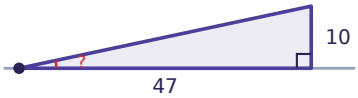
**Task card 13** Angles of Elevation & Depression

A kite string is 84 ft long and makes an angle of elevation of 56° with the ground. How high is the kite?



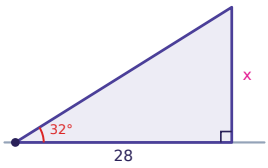

**Task card 14** Angles of Elevation & Depression

A ramp rises 10 ft over a horizontal distance of 47 ft. Find its angle of elevation.



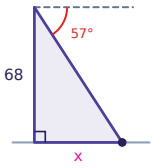

**Task card 15** Angles of Elevation & Depression

You stand 28 ft from the base of a tree. The angle of elevation to the top of the tree is 32°. How tall is the tree?



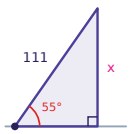

**Task card 16** Angles of Elevation & Depression

From the top of a 68 ft cliff, the angle of depression to a boat is 57°. How far is the boat from the base of the cliff?



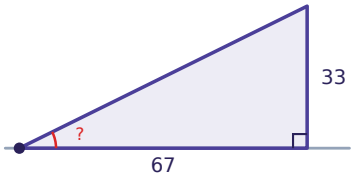

**Task card 17** Angles of Elevation & Depression

A kite string is 111 ft long and makes an angle of elevation of 55° with the ground. How high is the kite?



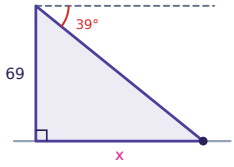

**Task card 18** Angles of Elevation & Depression

A ramp rises 33 ft over a horizontal distance of 67 ft. Find its angle of elevation.



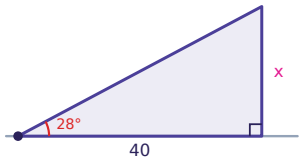
**Task card 19** Angles of Elevation & Depression

From the top of a 69 ft cliff, the angle of depression to a boat is 39°. How far is the boat from the base of the cliff?



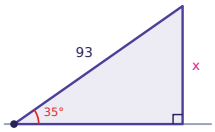

**Task card 20** Angles of Elevation & Depression

You stand 40 ft from the base of a flagpole. The angle of elevation to the top of the flagpole is 28°. How tall is the flagpole?



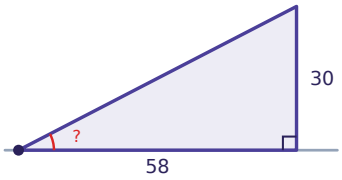

**Task card 21** Angles of Elevation & Depression

A kite string is 93 ft long and makes an angle of elevation of 35° with the ground. How high is the kite?



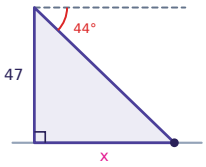

**Task card 22** Angles of Elevation & Depression

A ramp rises 30 ft over a horizontal distance of 58 ft. Find its angle of elevation.



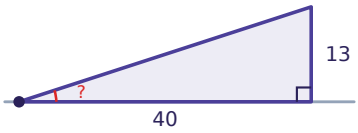

**Task card 23** Angles of Elevation & Depression

From the top of a 47 ft cliff, the angle of depression to a boat is 44°. How far is the boat from the base of the cliff?




**Task card 24** Angles of Elevation & Depression

A ramp rises 13 ft over a horizontal distance of 40 ft. Find its angle of elevation.



# Angles of Elevation & Depression Task Cards

Recording sheet · Grade 10 · Round lengths to the nearest tenth and angles to the nearest degree. Do not include units.

Name: _____ Date: _____

Scan to check your answers

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |

# Angles of Elevation & Depression Task Cards: Answer Key

Grade 10 · Medium

The answers online

| | | |
|---|---|---|
| **1.** 11.3 | **2.** 36.9 | **3.** 35.8 |
| **4.** 44° | **5.** 164.1 | **6.** 59.7 |
| **7.** 146.7 | **8.** 41.1 | **9.** 65.8 |
| **10.** 45° | **11.** 17° | **12.** 35.1 |
| **13.** 69.6 | **14.** 12° | **15.** 17.5 |
| **16.** 44.2 | **17.** 90.9 | **18.** 26° |
| **19.** 85.2 | **20.** 21.3 | **21.** 53.3 |
| **22.** 27° | **23.** 48.7 | **24.** 18° |