

Angle Sketch Studio

Draw and label angles using degree measures.

GRADE 4 • TEKS 4.7.D

4.7.D "draw an angle with a given measure; and"

NAME _____

DATE _____

BUILD AN ANGLE

An angle is made of two rays that meet at one endpoint, called the vertex. The degree measure tells how wide the opening between the rays should be. Draw the rays, then write the degree measure inside the opening.

WORKED EXAMPLE

Sketch and label an angle that measures 72° .

1. Mark one point for the vertex.
2. Draw one ray starting at the vertex.
3. Draw a second ray so the opening is 72° .
4. Write 72° inside the angle.

Answer: An angle with a 72° opening, labelled 72° .

PRACTICE 6 problems

- 1** Sketch and label an angle that measures 18° .

ANSWER _____

- 2** Sketch and label an angle that measures 45° .

ANSWER _____

- 3** Sketch and label an angle that measures 90° .

ANSWER _____

- 4** Sketch and label an angle that measures 107° .

ANSWER _____

- 5** Sketch and label an angle that measures 135° .

ANSWER _____

- 6** Sketch and label an angle that measures 160° .

ANSWER _____

APPLY IT Show your work

- 1** A soccer player plans a passing lane that opens 62° from the goal line. Sketch an angle to show the passing lane. Label the angle.

WORK SPACE

ANSWER _____

- 2** For an art design, Nia wants two paintbrush handles to make an opening of 118° . Sketch the angle her handles should make. Label the angle.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A game character makes a turn made of a 37° turn and then a 58° turn in the same direction. Draw one angle that shows the complete turn. Label the two parts and the total angle.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Sketch and label an angle that measures 18° .	An angle with an 18° opening, labelled 18°.
2	Sketch and label an angle that measures 45° .	An angle with a 45° opening, labelled 45°.
3	Sketch and label an angle that measures 90° .	An angle with a 90° opening, labelled 90°.
4	Sketch and label an angle that measures 107° .	An angle with a 107° opening, labelled 107°.
5	Sketch and label an angle that measures 135° .	An angle with a 135° opening, labelled 135°.
6	Sketch and label an angle that measures 160° .	An angle with a 160° opening, labelled 160°.

PART 2 • APPLY IT

1. **An angle with a 62° opening, labelled 62° .** The passing lane opens 62° from the goal line. The sketch should show and label a 62° angle.
2. **An angle with a 118° opening, labelled 118° .** The opening between the paintbrush handles is 118° . The sketch should show and label a 118° angle.

CHALLENGE

A 95° angle, with parts labelled 37° and 58° and the total labelled 95° .

Accept sketches with rays in either direction if the intended opening and label match the given measure. For the challenge, accept any correctly drawn 95° angle that shows $37^\circ + 58^\circ = 95^\circ$.