

Mathematics Class Slides

Bronx Early College Academy

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23 March 2020

11.1 Deltamath point-slope practice, Tuesday 24 March

11.2 Circle equations review, Thursday 26 March

11.3 Circle area and circumference, Tuesday 31 March

GQ: How do we write a linear equation given a point and slope?

CCSS: HSG.CO.B6-8 Understand congruence in terms of rigid motions 11.1 Monday 23 March

Do Now: Welcome to Beca Online!

- ▶ Complete the attendance question in Google Classroom
- ▶ Write in your notebook my new email, chuson@beca324.org
- ▶ Complete the G-Classroom "Do Now" questions

BECA Online expectations

Lesson:

Point-slope form of linear equations

Khan Academy video & Deltamath practice problems

Homework: Complete Deltamath practice, due by 10:00pm

GQ: How do we define a circle with an equation?

CCSS: HSG.GPE.A1 Geometry & equations of conics

11.2 Thursday 26 March

Do Now: Point-slope assessment; answer by Zoom private message

1. What is the slope of $y = \frac{3}{2}x + 5$?
2. Find the y -intercept of $4x - y = 7$
3. Identify a point on the line $y - 3 = \frac{1}{2}(x + 1)$ as an ordered pair
4. Identify a point on the line $y = \frac{1}{2}x + 6$ as an ordered pair
5. Find the equation of the line with slope 2 through $(-4, 9)$

Lesson: Finding the center and radius of a circle given its equation
Video, Desmos discussion; Deltamath classwork "Circle Equations"
Extra credit: Deltamath "System of Equations of Circle/Line (L1)"

Daily practice: Khan Academy triangle & parallelogram areas

GQ: How do we define a circle with an equation?

CCSS: HSG.GPE.A1 Geometry & equations of conics

11.2 Thursday 26 March

Do Now: Point-slope assessment; Answers

1. What is the slope of $y = \frac{3}{2}x + 5$? Answer $\frac{3}{2}$
2. Find the y -intercept of $4x - y = 7$ Answer -7
3. Identify a point on the line $y - 3 = \frac{1}{2}(x + 1)$ as an ordered pair
Answer $(-1, 3)$
4. Identify a point on the line $y = \frac{1}{2}x + 6$ as an ordered pair
 $(0, 6)$, the y -intercept; others: $(2, 7)$, $(3, 8)$, etc
5. Find the equation of the line with slope 2 through $(-4, 9)$
Answer: $y - 9 = 2(x + 4)$

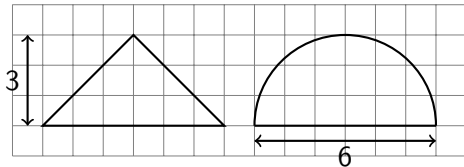
GQ: How do we calculate area & circumference of circles?

CCSS: HSG.GPE.A1 Geometry & equations of conics

11.3 Tuesday 31 March

Do Now: Simple area and perimeter. (answer in G-Classroom)

1. Find the area of the triangle.
2. Find the area and perimeter of the semi-circle.



Lesson:

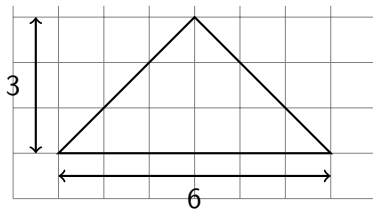
Simple areas, compound shapes, “negative” space (subtracting)

Classwork: Deltamath (extra homework problems)

Daily math work: Khan Academy circle practice

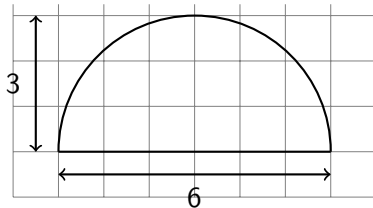
Do Now: Solutions of area and perimeter of simple shapes

Triangle: $A = \frac{1}{2}bh$



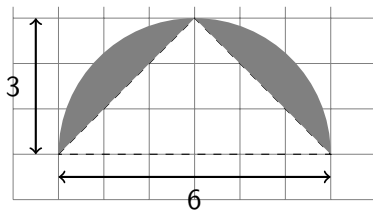
Circle:

$$A = \pi r^2 \quad C = \pi D = 2\pi r$$

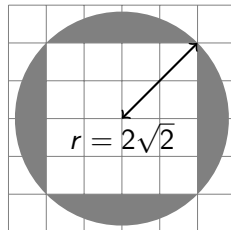


Compound shapes, “negative space” or subtracting areas

Find the area of the shaded region.



Challenge: Find the area of the shaded regions.



Do Now: Combine the areas of figures

CCSS: HSG.GPE.A1 Equation of a circle of given center, radius 8.11 Wednesday 12 Feb

- Copy definition: **slant height** - the diagonal length of a triangle, cone, or pyramid
- Find the area of the figure (triangle+rectangle+semi-circle)

