

GEOMETRY – WEBSITE RESOURCES

Chapter 1 - Points, Lines, Planes and Angles

1-2 Points Lines and Planes

Undefined Terms

<http://www.youtube.com/watch?v=GK3h7LzqsUg>

1-3 Segments, Rays and Distance

Line Segments

<http://www.youtube.com/watch?v=Pjhn1EAWTok>

Midpoints and Congruent Segments

http://www.youtube.com/watch?v=I7LZg_oTRfo

Segment Addition Postulate

<http://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-geometry/line-segment-algebra/v/segment-addition>

http://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-geometry/line-segment-algebra/e/segment_addition

Rays

<http://www.youtube.com/watch?v=HkdicQdB060>

1-4 Angles

Types of Angles

<http://www.youtube.com/watch?v=rsNINmcFQy4#t=98>

<http://www.youtube.com/watch?v=m7ZQc8CWdCw#t=15>

Angle Bisector

<http://www.youtube.com/watch?v=n5L6pesFoUg>

Congruent Angles

https://www.youtube.com/watch?v=hYnG2y6_luU

Angle Addition Postulate

<https://www.youtube.com/watch?v=k8wSxkxUgck>

Angle Addition Postulate Practice

https://www.khanacademy.org/math/geometry/parallel-and-perpendicular-lines/complementary-supplementary-angles/e/angle_addition_postulate

Chapter 2 Deductive Reasoning

2-1 If-Then Statements and Converses

Converse:

<http://www.youtube.com/watch?v=l-ej-Dazebl#t=12>

2-2 Properties from Algebra

Transitive, Reflexive and Symmetric Properties of Equality

<http://www.onlinemathlearning.com/transitive-reflexive-property.html>

2-4 Special Types of Angles

Complementary and Supplementary Angles

<http://www.youtube.com/watch?v=h9zUbWPqVpc>

Vertical Angles

<http://www.youtube.com/watch?v=fvYE8ZCBTtA>

2-5 Perpendicular Lines

Definition

<http://www.youtube.com/watch?v=VVvErPLG2EQ>

Chapter 3 Parallel Lines and Planes

3-1 Definitions

Skew Lines

http://www.youtube.com/watch?v=UN0nOrs_4EY

Parallel Planes and Lines

<http://www.youtube.com/watch?v=NaaroGmZC3g>

3-2 Properties of Parallel Lines

Corresponding Angles

<http://www.youtube.com/watch?v=hFljoDPxPdk#t=11>

Alternate Interior Angles

<http://www.youtube.com/watch?v=3ACJa4pYG8g>

Same-side Interior Angles

<http://www.youtube.com/watch?v=BkW9JXazdAA>

3-3 Proving Lines Parallel

<http://www.youtube.com/watch?v=92gT6vHtEXc>

3-4 Angles of a Triangle

Triangle classifications:

<http://www.youtube.com/watch?v=I2Lt-jU3IJc>

Triangle Sum Theorem

<http://www.youtube.com/watch?v=k0MLhzZK-SM>

Measure of exterior remote angles of a triangle

<http://www.youtube.com/watch?v=YS2K2SpvVIA>

3-5 Angles of a Polygon

Convex and concave polygons

http://www.youtube.com/watch?v=W8Zq_A1MPqs

interior angles

http://www.khanacademy.org/math/geometry/parallel-and-perpendicular-lines/triang_prop_tut/v/sum-of-interior-angles-of-a-polygon

Exterior angles

<http://www.youtube.com/watch?v=MFhwb3UXNRI>

Chapter 4 Congruent Triangles

4.1 Congruent Figures

<http://www.youtube.com/watch?v=CUKDzC5f6B4>

4-1, 4-2, 4-5 Congruent Triangles - ASA, AAS, SSS, SAS

http://www.khanacademy.org/math/geometry/congruent-triangles/cong_triangle/v/finding-congruent-triangles

Triangle Congruence (ASA and AAS)

<http://www.youtube.com/watch?v=jKFqAHfWw50>

Review and practice

http://www.khanacademy.org/math/geometry/congruent-triangles/cong_triangle/e/congruent_triangles_1

<http://www.youtube.com/watch?v=fNpELtXuCjc>

<http://www.youtube.com/watch?v=T23BbKHTH3o>

4-3 Using Congruent Triangles

CPCTC (Proofs)

<http://www.youtube.com/watch?v=lyB4J9FC1ck>

4-4 The Isosceles Triangle Theorem

<http://www.youtube.com/watch?v=ThG7JfmZ70M>

4-5 AAS Theorem and HL Theorem

<http://www.youtube.com/watch?v=5ZNAQ5Enx8I>

4-7 Medians, Altitudes and Perpendicular Bisectors

http://www.khanacademy.org/math/geometry/triangle-properties/triangle_property_review/v/review-of-triangle-properties

Chapter 7 - Similar Polygons

7.1 Ratio & Proportion

<http://www.youtube.com/watch?v=idFf12esZ3E>

7.2 Properties of Proportions

<http://www.youtube.com/watch?v=OvydgQ8tSQL>

7.3 Similar Polygons

<http://www.youtube.com/watch?v=6gLW8LBaw6g>

7.4 AA Similarity Postulate

<http://www.youtube.com/watch?v=wIMuiKCYoWs>

7.5 SAS Similarity Theorem / SSS Similarity Theorem

SAS Similarity Theorem

http://www.youtube.com/watch?v=_7Kogxucl-4

SSS Similarity Theorem

<http://www.youtube.com/watch?v=SNG-pcPRuBk>

Comparing Triangle Similarity Postulate and Theorems

<http://www.youtube.com/watch?v=0b0VxwthbJU>

7.6 Proportional Lengths

Triangle Proportionality Theorem

http://www.youtube.com/watch?v=F_OrA_9WkVE

Triangle Angle-Bisector Theorem

<http://www.youtube.com/watch?v=6WZRpy7ry0>

Chapter 8 - Right Triangles

Simplifying Radicals

<http://www.khanacademy.org/math/arithmetic/exponents-radicals/radical-radicals/v/simplifying-radicals>

Adding and Subtracting Radicals

<http://www.youtube.com/watch?v=QsHJStWF-MM>

Multiplying and Dividing Radicals

http://www.youtube.com/watch?v=PMam2c_eXj4

8-2 Pythagorean Theorem

<http://www.youtube.com/watch?v=-vXr5gwBxVg>

8-3 Converse of Pythagorean Theorem and Pythagorean Triples

<http://www.youtube.com/watch?v=bWRIL0IMAWk>

<http://www.youtube.com/watch?v=zZ8xBAnnI>

<http://www.youtube.com/watch?v=XZmwHdRi5YU>

8-4 Special Right Triangles

45-45-90 Theorem

<http://www.youtube.com/watch?v=KqOjslZTUj4>

30-60-90 Theorem

<http://www.youtube.com/watch?v=3vVWP7ASpi4>

8-5 & 8-6 The Tangent, Sine & Cosine Ratio

Finding the missing side given angle

<http://www.youtube.com/watch?v=ZWlyWssa7aY>

Finding the missing angle given sides

<http://www.youtube.com/watch?v=7rJfKGmp6fw>

8-7 Applications of Right Triangle Trigonometry – Angle of Elevation & Depression

<http://www.youtube.com/watch?v=0PjWnrLWlrQ>

TRIANGLES

Triangle Side Inequalities

<http://www.youtube.com/watch?v=eNNaT9JmqJY>

Triangle Inequality Theorem

http://www.youtube.com/watch?v=OoLb_NnnKSQ#t=41

Remote Interior Angles

http://www.youtube.com/watch?v=3roTCMW4_u4

Parallelograms

Properties of Parallelograms

<http://www.youtube.com/watch?v=-Weia4Pe-9k>

Proving Quadrilaterals are Parallelograms

<http://www.youtube.com/watch?v=e96g4vpMrOY>

Theorems Involving Parallel Lines

<http://www.youtube.com/watch?v=LeMemQsI57U>

Special Parallelograms

<http://www.youtube.com/watch?v=mAg3X0VQ-yA>

Trapezoids

<http://www.youtube.com/watch?v=GoFcsArnc-A>

SIMILAR POLYGONS

Ratio & Proportion

<http://www.youtube.com/watch?v=idFf12esZ3E>

Properties of Proportions

<http://www.youtube.com/watch?v=OvydgQ8tSQL>

Similar Polygons

<http://www.youtube.com/watch?v=6gLW8LBaw6g>

AA Similarity Postulate

<http://www.youtube.com/watch?v=wIMuiKCYoWs>

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Comparing Triangle Similarity Postulate and Theorems

<http://www.youtube.com/watch?v=0b0VxwthbJU>

Proportional Lengths - Triangle Proportionality Theorem

http://www.youtube.com/watch?v=F_0rA_9WkVE

Triangle Angle-Bisector Theorem

<http://www.youtube.com/watch?v=6WZRypy7ry0>

RADICAL REVIEW

Simplifying Radicals

<http://www.youtube.com/watch?v=ONx4l5l1UNg>

<http://www.youtube.com/watch?v=6ntZ6s7iy5k>

<http://www.khanacademy.org/math/arithmetric/exponents-radicals/radical-radicals/v/simplifying-radicals>

Adding and Subtracting Radicals

<http://www.youtube.com/watch?v=QsHJStWF-MM>

Multiplying and Dividing Radicals

http://www.youtube.com/watch?v=PMam2c_eXj4

Basic Terms of Circles

Definitions of center, radius, diameter, congruent circles, concentric circles

<http://www.youtube.com/watch?v=dZgSZ-QdoKU&list=PL1C537F4A57B3F09B>

Definitions of chord, diameter, tangent, point of tangency

<http://www.youtube.com/watch?v=qPSJersf4ZQ>

<http://www.youtube.com/watch?v=LpKcWBkh19g>

Tangents

<http://www.youtube.com/watch?v=E2uoEMwuyak>

<http://www.youtube.com/watch?v=it6yi7suSIQ>

Common tangents to two circles

<http://www.youtube.com/watch?v=mPBO61d9v3Q>

Tangent circles

“touching internally” means circles are internally tangent

“touching externally” means circles are externally tangent

<http://www.youtube.com/watch?v=CioF3HF-jWg>

Definitions of minor arc, major arc and semicircle

<http://www.youtube.com/watch?v=L4l05-ydHBs>

Definition of central angle

<http://www.youtube.com/watch?v=4Y9D0v0x4H8>

Definition of congruent arcs

<http://www.youtube.com/watch?v=05pdbCf61sk>

Arc Addition Postulate

<http://www.youtube.com/watch?v=NUwgYauUR7s>

Arcs and Chords

<http://www.youtube.com/watch?v=KZsz2zAD0H4>

<http://www.youtube.com/watch?v=ma0qXCyxiQo>

<http://www.youtube.com/watch?v=UJbv2ETvsC4>

Area

other videos:

<http://www.youtube.com/watch?v=b1E3eFF43fY>

COORDINATE GEOMETRY

Midpoint Formula

http://www.youtube.com/watch?v=CY8_ygkj9VM

Perimeter

<http://www.youtube.com/watch?v=ZM0dReGZSi8>

Parts of a Circle

<http://www.youtube.com/watch?v=dZqSZ-QdoKU>

Transformations/Dilations

<http://www.youtube.com/watch?v=tkH8R7Eo8QQ>

Teacher Websites

<http://www.kutasoftware.com/freeige.html>

http://www.homeschoolmath.net/worksheets/classify_triangles.php

**Practice and Review various geometry topics

<http://www.ixl.com/math/geometry>