



Math worksheet on 'Complex Numbers - Rectangular Form to Polar Form (Degrees) (Level 1)'. Part of a broader unit on 'Complex Numbers'

Learn online: app.mobius.academy/math/units/complex_numbers/

2 Find the polar form in degrees of this complex number

$$-3 - 6i$$

a $3.1(\cos(341^\circ) + i \cdot \sin(341^\circ))$
b $3.4(\cos(299^\circ) + i \cdot \sin(299^\circ))$
c $5.7(\cos(298^\circ) + i \cdot \sin(298^\circ))$
d $6.7(\cos(243^\circ) + i \cdot \sin(243^\circ))$
e $6.4(\cos(309^\circ) + i \cdot \sin(309^\circ))$
f $5(\cos(270^\circ) + i \cdot \sin(270^\circ))$

4 Find the polar form in degrees of this complex number

$$-6 + 4i$$

a $8.5(\cos(56^\circ) + i \cdot \sin(56^\circ))$
b $9.1(\cos(310^\circ) + i \cdot \sin(310^\circ))$
c $6.8(\cos(48^\circ) + i \cdot \sin(48^\circ))$
d $7.2(\cos(146^\circ) + i \cdot \sin(146^\circ))$
e $8.3(\cos(303^\circ) + i \cdot \sin(303^\circ))$
f $6.8(\cos(324^\circ) + i \cdot \sin(324^\circ))$

6 Find the polar form in degrees of this complex number

$$4 + 5i$$

a $8.1(\cos(330^\circ) + i \cdot \sin(330^\circ))$
b $6.4(\cos(51^\circ) + i \cdot \sin(51^\circ))$
c $7.3(\cos(344^\circ) + i \cdot \sin(344^\circ))$
d $8.6(\cos(306^\circ) + i \cdot \sin(306^\circ))$
e $6.4(\cos(39^\circ) + i \cdot \sin(39^\circ))$
f $7.8(\cos(329^\circ) + i \cdot \sin(329^\circ))$

1 Find the polar form in degrees of this complex number

$$2 + 3i$$

a $3.6(\cos(56^\circ) + i \cdot \sin(56^\circ))$
b $4.3(\cos(360^\circ) + i \cdot \sin(360^\circ))$
c $5.3(\cos(11^\circ) + i \cdot \sin(11^\circ))$
d $4.8(\cos(24^\circ) + i \cdot \sin(24^\circ))$
e $2.8(\cos(360^\circ) + i \cdot \sin(360^\circ))$
f $4.8(\cos(321^\circ) + i \cdot \sin(321^\circ))$

3 Find the polar form in degrees of this complex number

$$5 + 3i$$

a $5.8(\cos(31^\circ) + i \cdot \sin(31^\circ))$
b $9.1(\cos(354^\circ) + i \cdot \sin(354^\circ))$
c $5.8(\cos(211^\circ) + i \cdot \sin(211^\circ))$
d $7.5(\cos(337^\circ) + i \cdot \sin(337^\circ))$
e $5.1(\cos(349^\circ) + i \cdot \sin(349^\circ))$
f $8.1(\cos(338^\circ) + i \cdot \sin(338^\circ))$

5 Find the polar form in degrees of this complex number

$$5 + 4i$$

a $5(\cos(127^\circ) + i \cdot \sin(127^\circ))$
b $8(\cos(61^\circ) + i \cdot \sin(61^\circ))$
c $8.8(\cos(307^\circ) + i \cdot \sin(307^\circ))$
d $6.4(\cos(39^\circ) + i \cdot \sin(39^\circ))$
e $10.5(\cos(59^\circ) + i \cdot \sin(59^\circ))$
f $9.6(\cos(321^\circ) + i \cdot \sin(321^\circ))$

7 Find the polar form in degrees of this complex number

$$2 - 5i$$

a $5.3(\cos(50^\circ) + i \cdot \sin(50^\circ))$
b $5.9(\cos(43^\circ) + i \cdot \sin(43^\circ))$
c $5.4(\cos(292^\circ) + i \cdot \sin(292^\circ))$
d $4.6(\cos(300^\circ) + i \cdot \sin(300^\circ))$
e $5.3(\cos(22^\circ) + i \cdot \sin(22^\circ))$
f $6.9(\cos(299^\circ) + i \cdot \sin(299^\circ))$